

OHIO WEATHER FOR 1913

OHIO
Agricultural Experiment
Station

WOOSTER, OHIO, U. S. A., JUNE, 1914

BULLETIN 277



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³In cooperation with Bureau of Plant Industry, U. S. Department of Agriculture.

BULLETIN
OF THE
Ohio Agricultural Experiment Station

NUMBER 277

JUNE, 1914

OHIO WEATHER FOR 1913

BY J. WARREN SMITH AND C. A. PATTON

EXPLANATORY

BY THE DIRECTOR

The extension of the work of the Experiment Station over the state, through the district and county experiment farms, makes it necessary that its weather records should be state-wide in their application. Hitherto the only attempt at such application has been to give the average rainfall and temperature for the entire state for comparison with the observations taken at the main station at Wooster, but it is now possible, through the cooperation of Prof. J. Warren Smith, Section Director for Ohio of the U. S. Weather Bureau, to supplement these records with a series of diagrammatic maps, showing at a glance the comparative weather conditions for the different sections of the state.

These maps will be followed by the usual summary tables.

Mean temperature, January, 1913



Figure 1. Average temperature for January, 1913. The mean temperature for the state was 36.0° . The highest local monthly mean was 43.2° in Lawrence county, and 43.0° in Meigs county; the lowest local monthly mean was 29.9° in Fulton county. The highest temperature reported was 70° in Meigs county on the 20th and 31st, and lowest was 3° in Wood county on the 9th. The month was marked by frequent and unusually warm days, being the warmest January on record since 1890 when the mean temperature was 38.8° .

Temperature departures, January, 1913

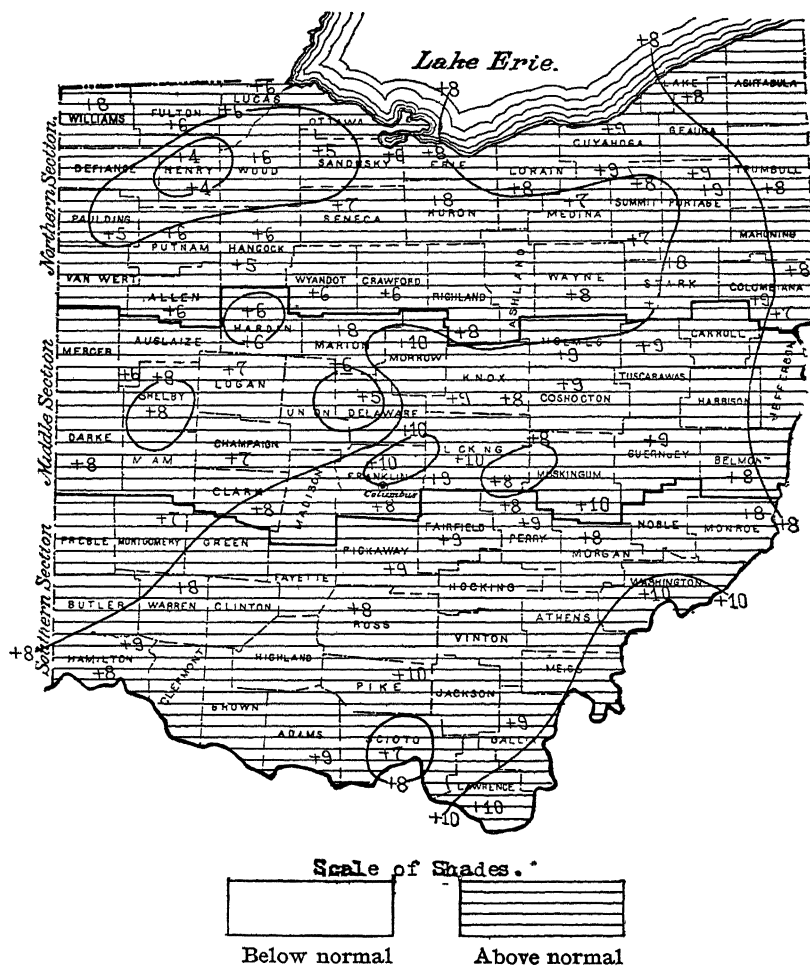


Figure 2. Temperature departures from the normal for January, 1913. The temperatures were far above normal throughout the whole state, ranging from 3.9° above the normal in Henry county, to 11.1° in Washington, 10.2° in Lawrence county, and 10.3° in Franklin county. The state as a whole averaged 7.8° above the normal.

Precipitation, January, 1913

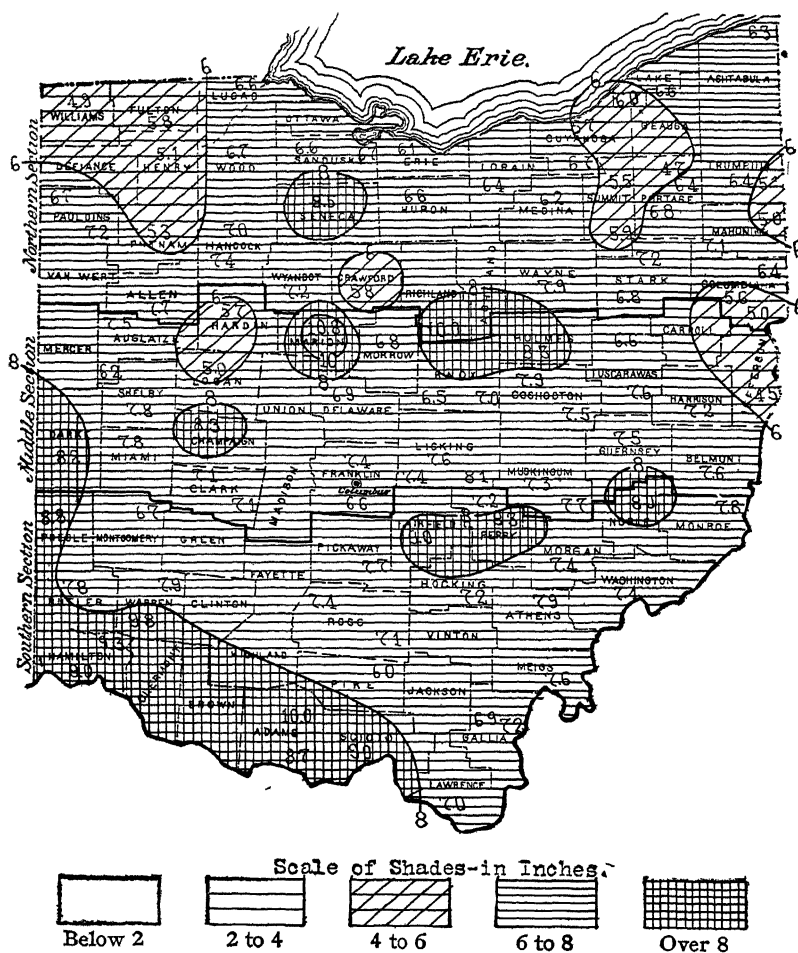
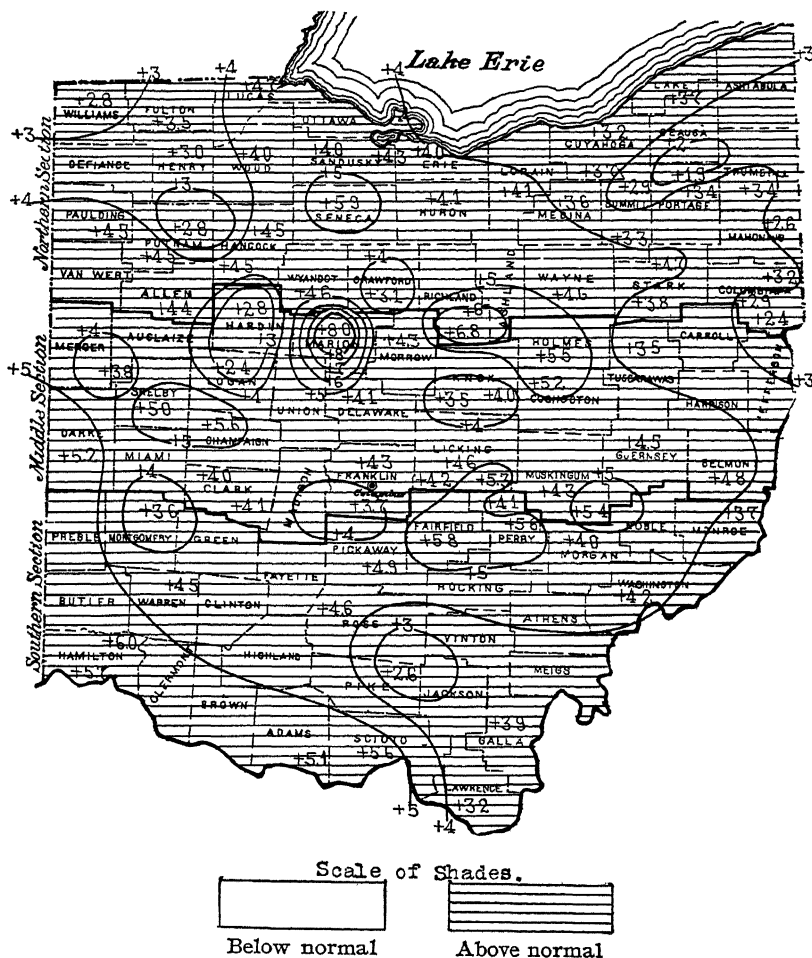


Figure 3. Precipitation during January, 1913. The average precipitation for the state was 7.01 inches, making the month by far the wettest January on record. Not only was the January record broken, but the state averages for any other month have been larger only five times in the last fifty years. The largest amount reported was 10.80 inches in Marion county, and least was 4.50 inches in Jefferson county. The precipitation was heaviest in the southeastern counties and in scattered sections of the central part of the state. The north-eastern and northwestern counties showed the lightest falls. The heavy rain-fall caused high water in all streams and rivers during the first part of the month.

Precipitation departures, January, 1913



Snowfall, January, 1913

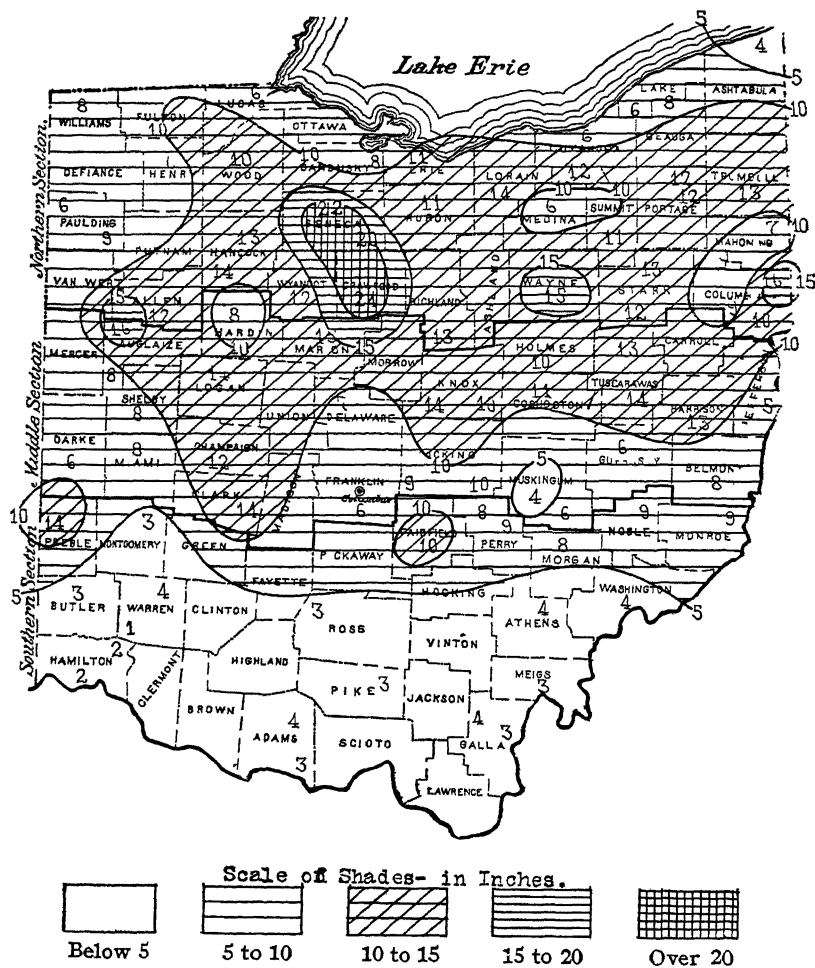


Figure 5. Snowfall for January, 1913. The average snowfall for the state was 8.6 inches. It was below the normal in nearly all except the northern counties, nearly all the precipitation falling as rain in the southern and border counties. What snow did fall remained on the ground but a short time, although in some of the northern counties the ground was covered from the third to the fifth, and on the twenty-eighth and twenty-ninth. The greatest amount for the month was 24.0 inches in Crawford county.

Mean temperature, February, 1913



Figure 6. Average temperatures for February, 1913. The mean temperature for the state was 26.7°. The highest local monthly mean was 35.0° degrees in Lawrence county and the lowest local monthly mean was 22.4° in Fulton county. The highest temperature reported was 77°, in Belmont county on the 21st, and the lowest was 15° below zero in Perry county on the 6th. Low temperatures prevailed during the first half of the month, but during the last half the weather was considerably milder, especially from the 19th to the 22nd.

Temperature departures, February, 1913

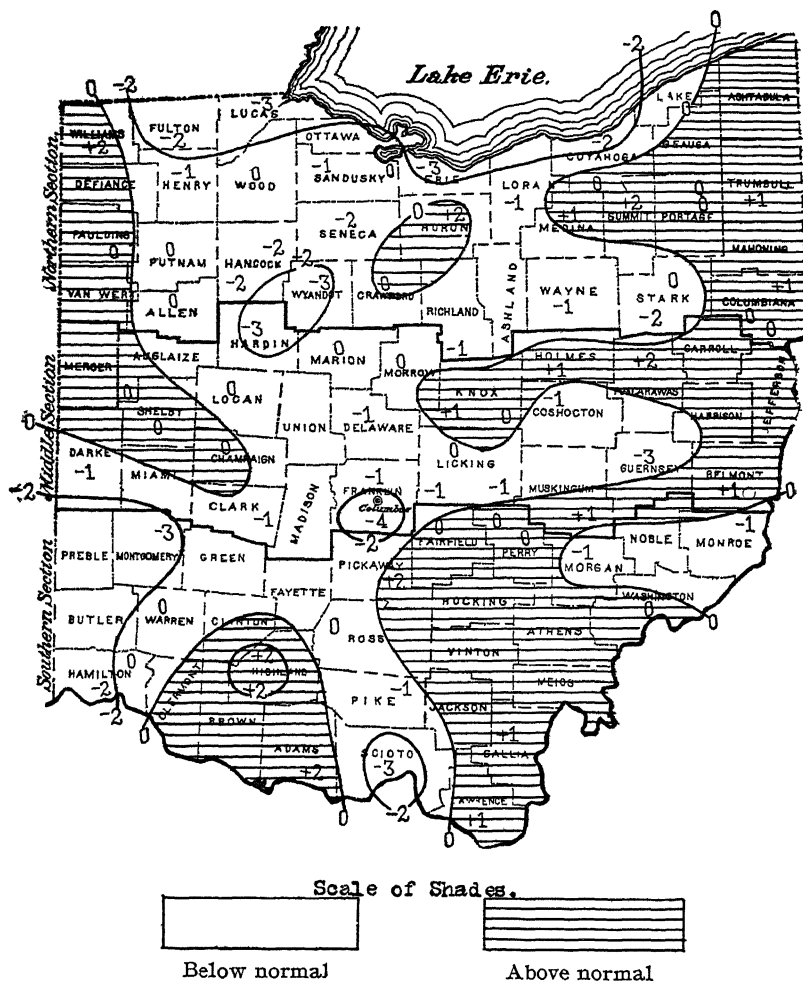


Figure 7. Temperature departures from the normal for February, 1913. The temperatures averaged 0.5° below normal for the state as a whole, ranging from 3.8° below normal in Franklin county to 2.1° above normal in Highland county. The month showed a sharp contrast to January, being nearly 10° colder.

Precipitation, February, 1913

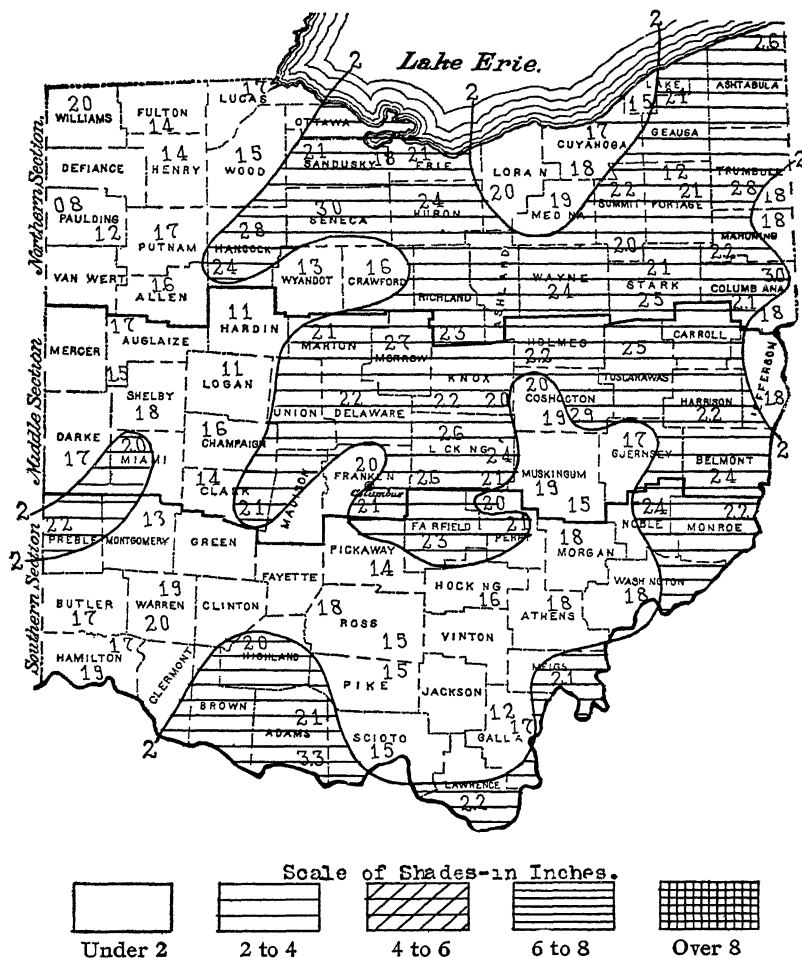


Figure 8. Precipitation during February, 1913. The average precipitation for the state was 1.94 inch, ranging from 3.32 inches in Adams county to 0.75 inch in Paulding county. With the exception of the 3rd the precipitation was scattered and quite light until near the close of the month.

Precipitation departures, February, 1913

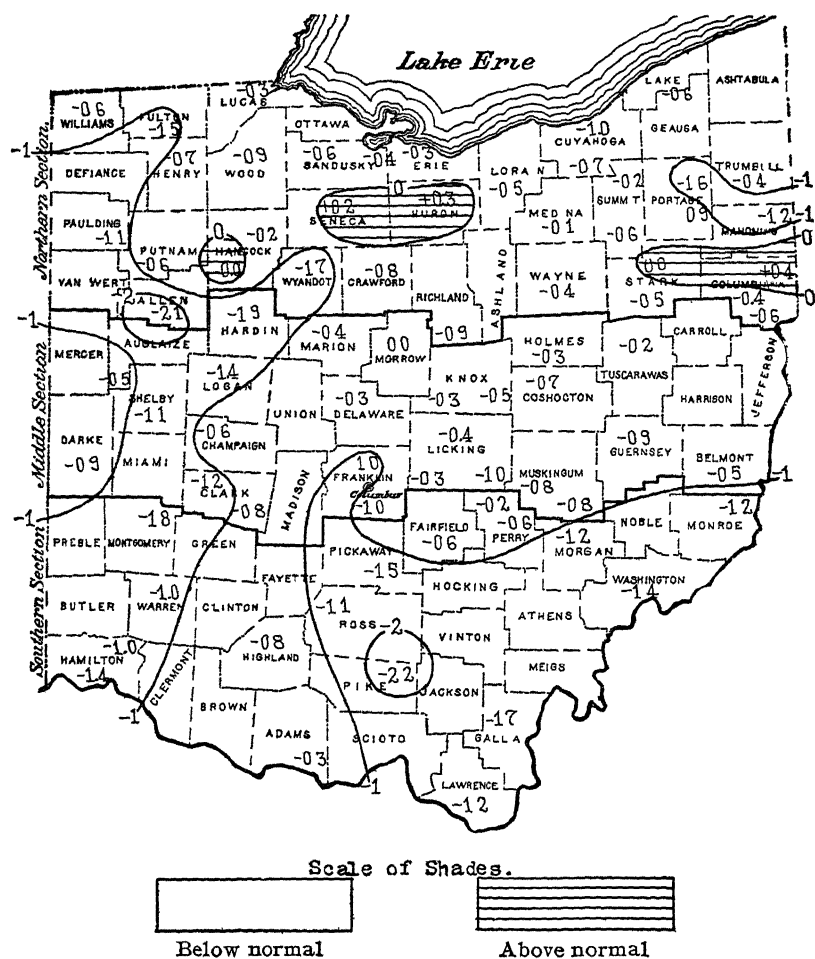


Figure 9. Departures from the normal precipitation for February, 1913. The average departure from the normal precipitation for the state was 0.77 inch below normal, ranging from 2.15 inches below normal in Pike county to 0.36 inch above normal in Columbiana county. Precipitation was in the form of snow during practically all of the first three weeks and was mostly in the form of rain during the last week. The number of rainy days averaged 8.

Snowfall, February, 1913

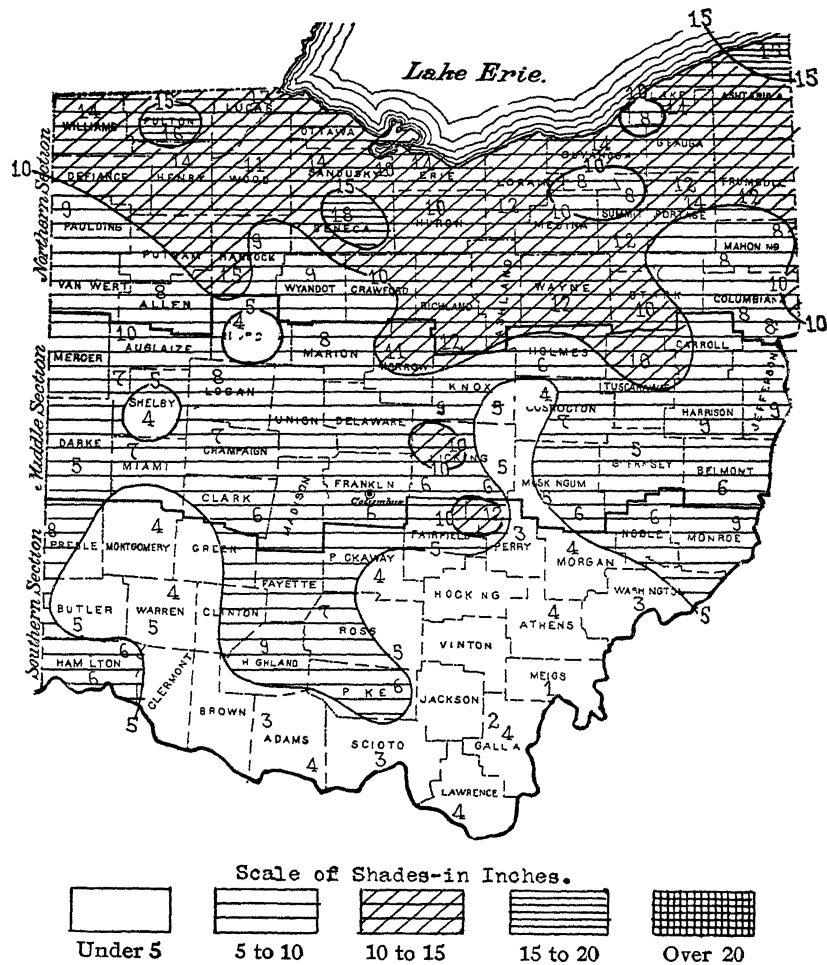


Figure 10. Snowfall for February, 1913. The average snowfall for the state was 6.9 inches, ranging from 18 inches in Seneca county to 1 inch in Meigs county. The snowfall averaged above normal in nearly all the northern counties and in scattered counties throughout the south. The snow of the 2nd and 3rd was exceptionally dry. The ground was generally well protected by snow from the 3rd to the 10th of the month when the coldest weather was experienced.

Mean temperature, March, 1913



Figure 11. Average temperatures for March, 1913. The mean temperature for the state was 40.1°. The highest local monthly mean was 47.6° in Gallia and in Lawrence counties; the lowest local monthly mean was 34.7° in Fulton county. The highest temperature reported was 80° in Adams county on the 14th and the lowest 8° below zero in Portage county on the 8th. Unusually warm weather for the time of year was experienced on the 14th and 20th. The 7th was the coldest day at most stations, although cold spells occurred on the 16-17th, 22nd, and 27-29th.

Temperature departures, March, 1913

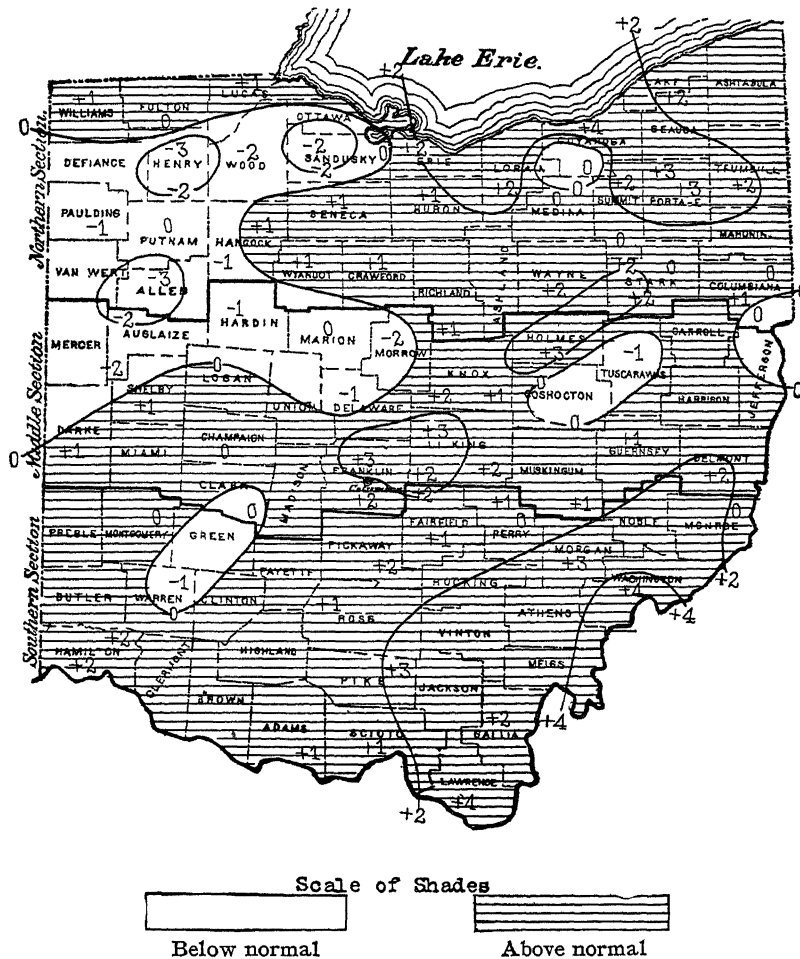


Figure 12. Temperature departures from the normal for March, 1913. The state as a whole averaged 0.9° above the normal, ranging from 3.2° below the normal in Henry county to 3.8° above the normal in Cuyahoga county and 4.1° above the normal in Washington county.

Precipitation, March, 1913

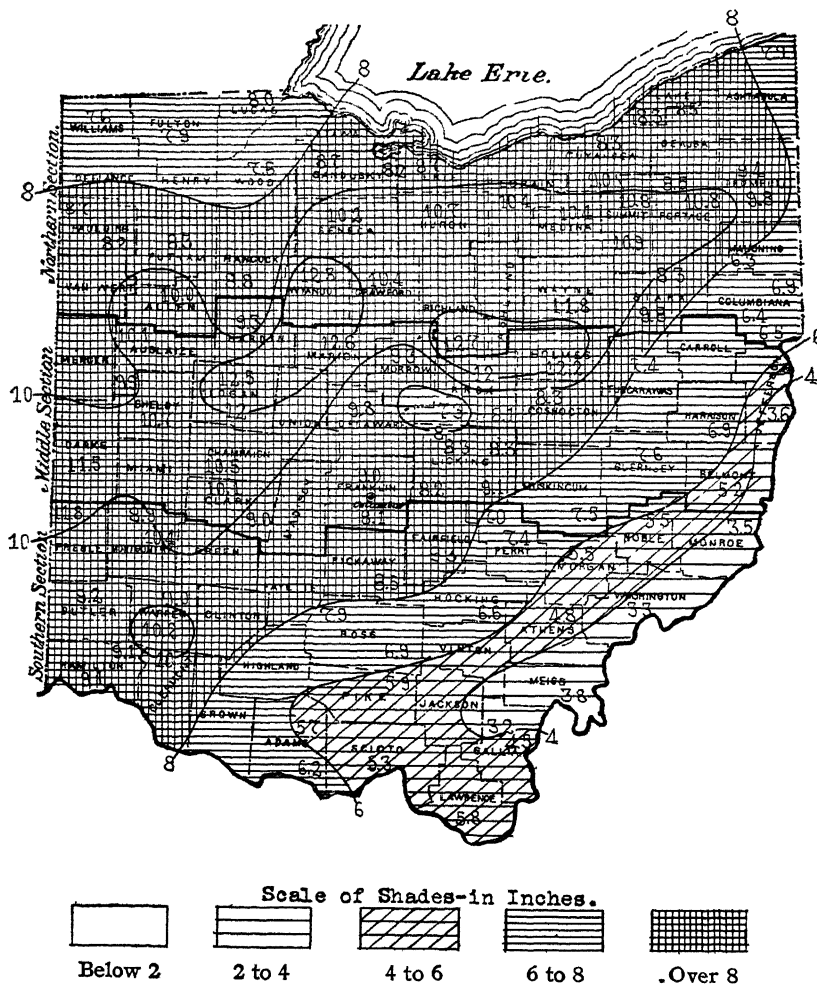


Figure 13. Precipitation for March, 1913. The average precipitation for the state was 8.40 inches, making the month the wettest March on record. The state averages for the other months have been greater in but two instances in the last fifty years. The largest amount reported was 12.68 inches in Richland county, and the least was 3.18 inches in Gallia county. The area of heaviest precipitation extended across the state from southwest to the northeast and followed closely the boundary line between the Lake Erie and Ohio River watersheds.

During the first three weeks the precipitation was rather light but from the 23rd to 27th rain fell almost continuously, and during much of the time at an excessive rate. At several stations in the middle-northern counties over ten inches fell in these five days, and over twelve inches during the month.

Precipitation departures, March, 1913

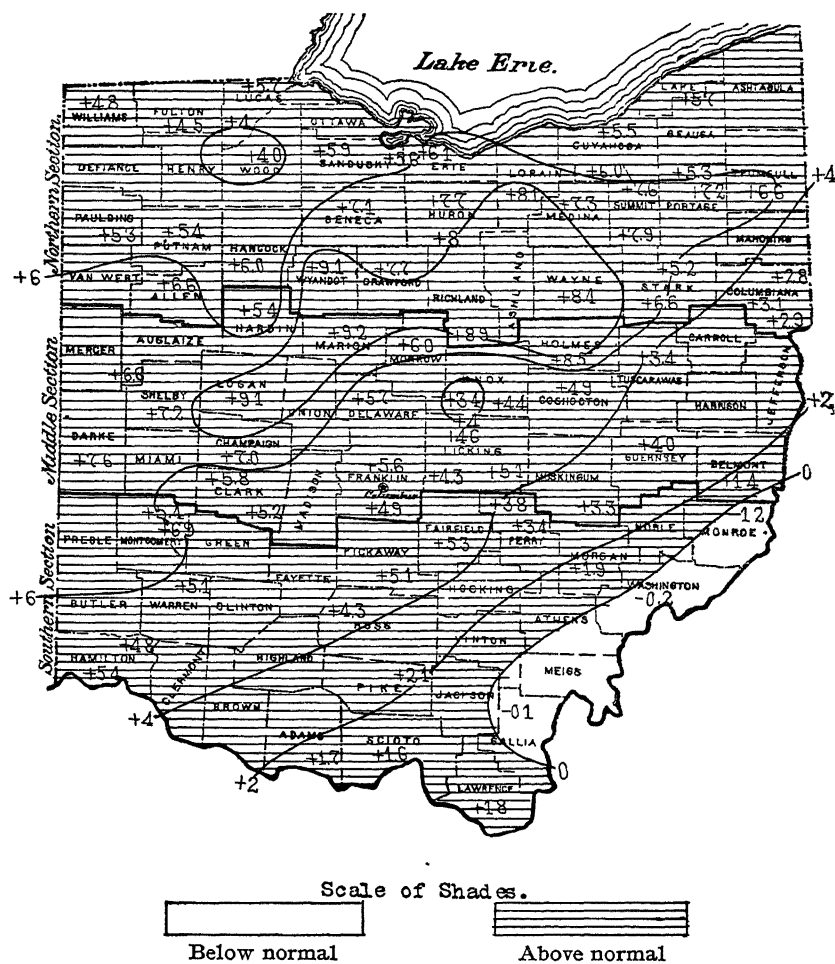


Figure 14. Departures from the normal precipitation for March, 1913. The average departure from the normal precipitation for the state was 5.28 inches above the normal, ranging from 1.15 inch below normal in Monroe county to 9.01 inches above normal in Logan county, 9.07 inches above normal in Wyandot county, and 9.19 inches above normal in Marion county. The average number of rainy days was 13.

The heavy rains of the 23rd-27th caused the most destructive flood in the history of the state. The estimated property loss in Ohio due to this flood was \$113,660,000, and there were 467 lives lost. The damage to agricultural interests was very great.

Snowfall, March, 1913

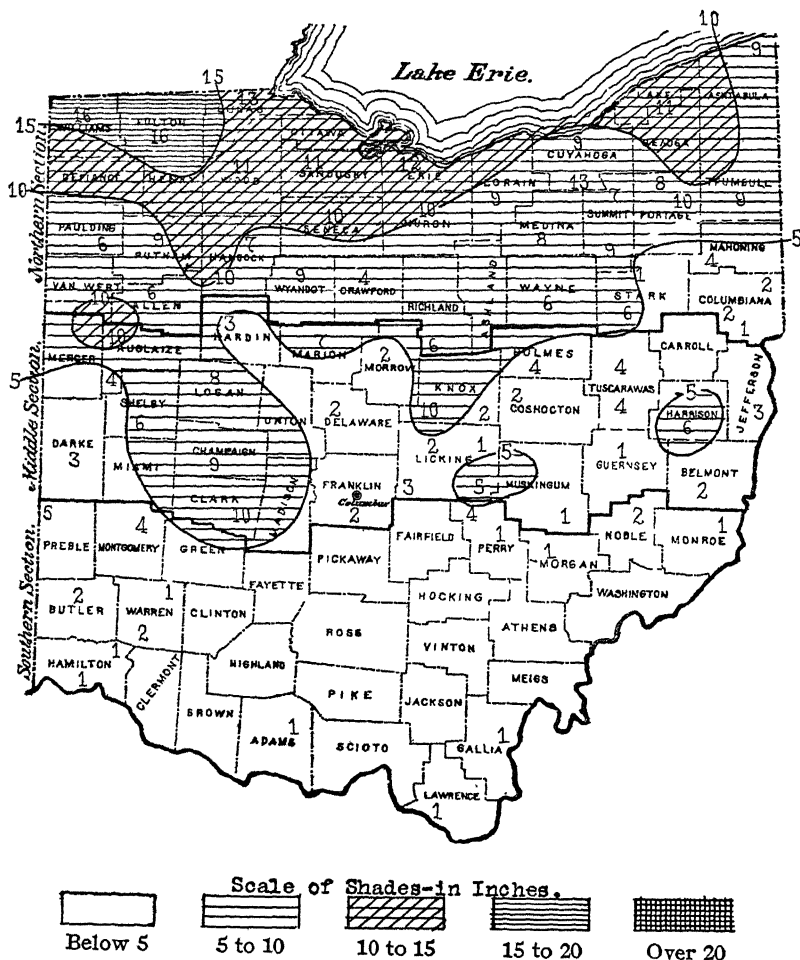


Figure 15. Snowfall for March, 1913. The average snowfall for the state was 5.1 inches, ranging from 16.3 inches in Williams county and 15.5 inches in Fulton county to a trace in some of the southern counties. It averaged above normal in nearly all of the northern counties, but was considerably below normal in the southern counties.

Mean temperature, April, 1913



Figure 16. Average temperatures for April, 1913. The mean temperature for the state was 50.0° . The highest local monthly mean was 55.0° in Lawrence county, and the lowest local monthly mean was 46.1° in Lake county. The highest temperature reported was 90° in Columbiana and Meigs counties, and the lowest was 18° in Portage county. Cloudy and cool weather prevailed during the first two weeks, and the 20th and 21st were unseasonably cool. The last few days were also cool but the rest of the month was bright and pleasant.

Temperature departures, April, 1913

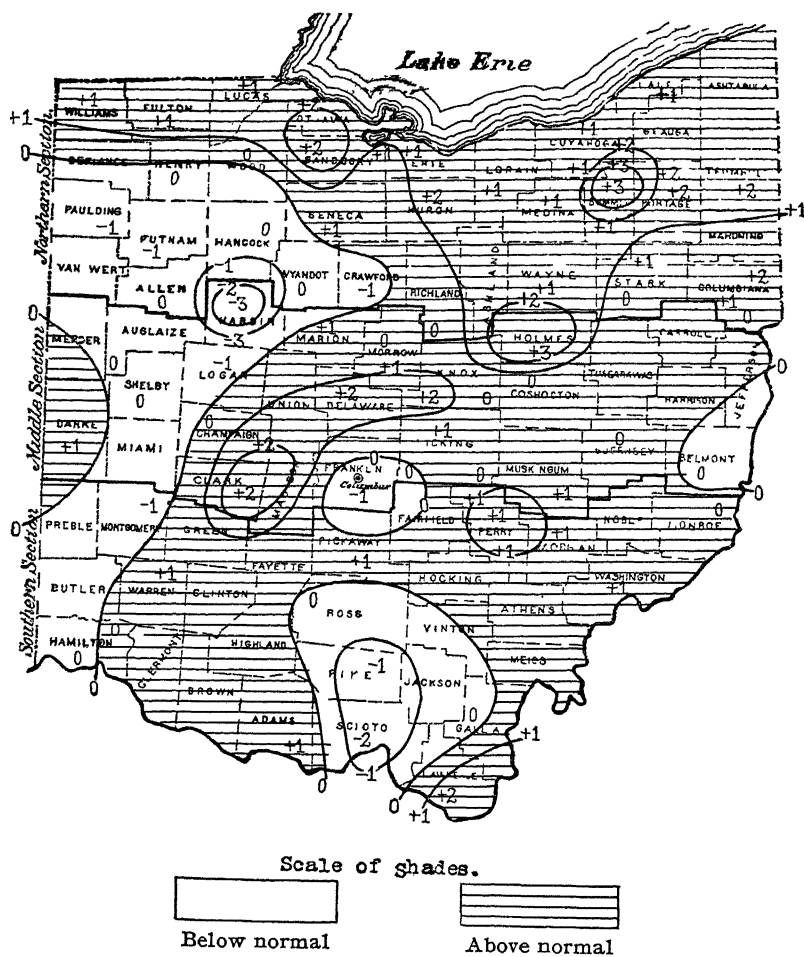


Figure 17. Temperature departures from the normal for April, 1913. The state as a whole averaged 0.6° above the normal, ranging from 2.7° below normal in Hardin county to 2.6° above normal in Holmes county, and 3.4° above the normal in Summit county.

Precipitation, April, 1913

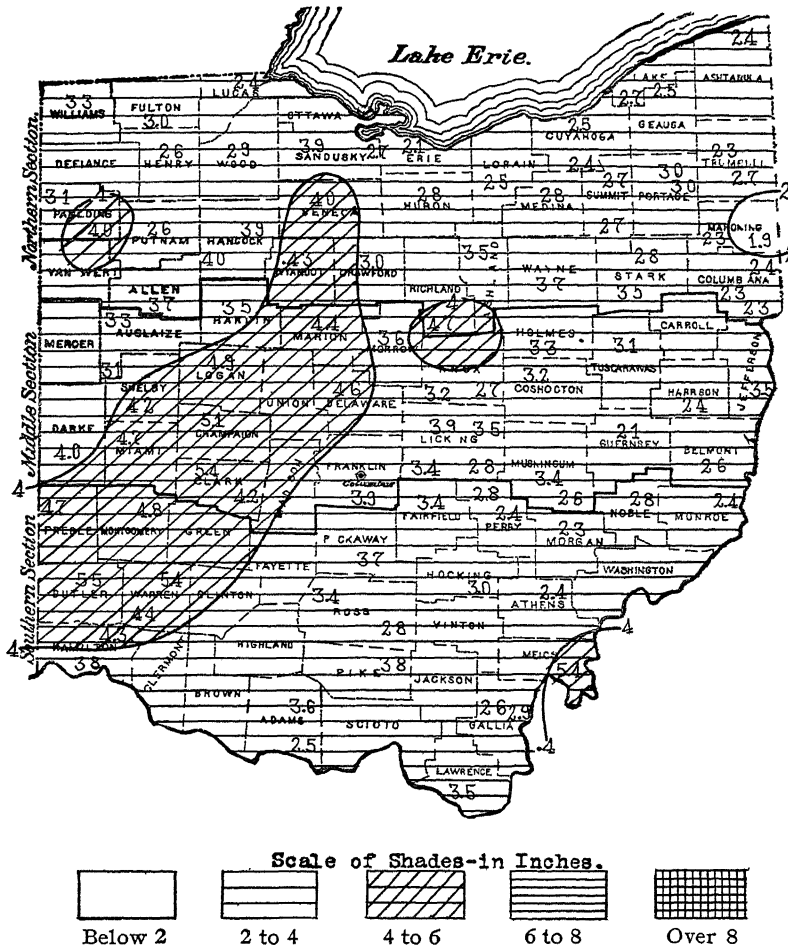


Figure 18. Precipitation for April, 1913. The average precipitation for the state was 3.35 inches. The largest amount was 5.50 inches in Butler county, although 5.36 inches was reported in Clark county. The least was 1.87 inch in Mahoning county. The greater part of the rainfall occurred during the first half of the month, although on the 26-28th quite general rains prevailed. The area of heaviest precipitation extended from the southwestern corner of the state to a point slightly south of the western end of Lake Erie. Practically no snow fell during the month.

Precipitation departures, April, 1913

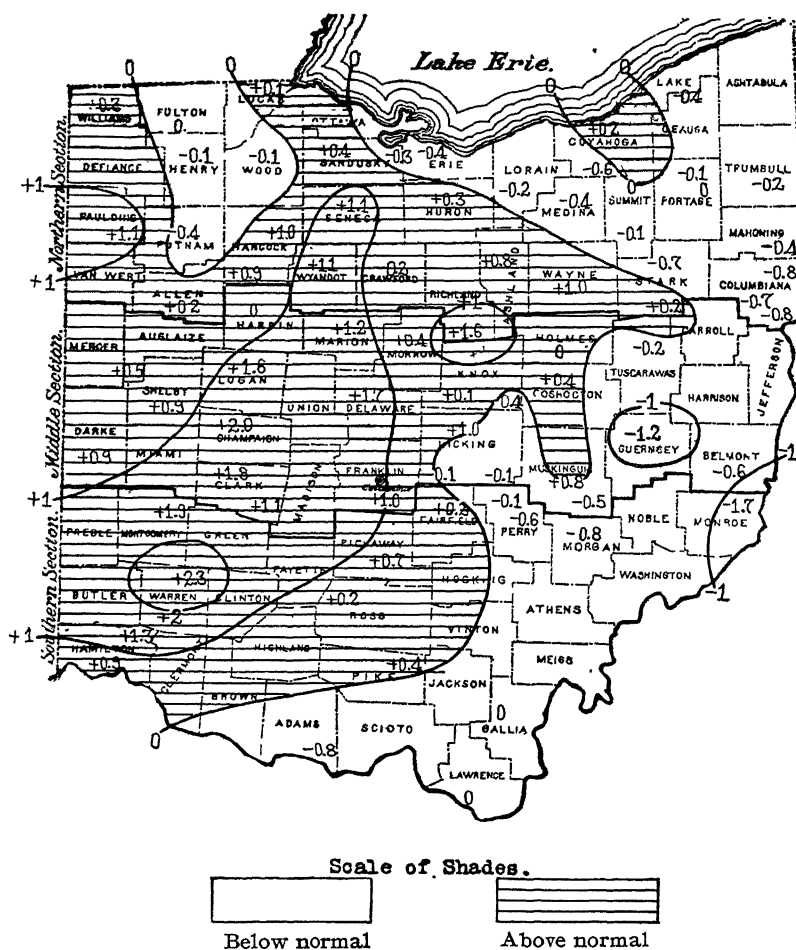


Figure 19. Departures from the normal precipitation for April, 1913. The average departure from the normal precipitation was 0.30 inch above the normal, ranging from 1.69 inch below normal in Monroe county to 2.33 inches above normal in Warren county. The number of rainy days averaged 10; no excessive precipitation was reported.

Mean temperature, May, 1913



Temperature departures, May, 1913

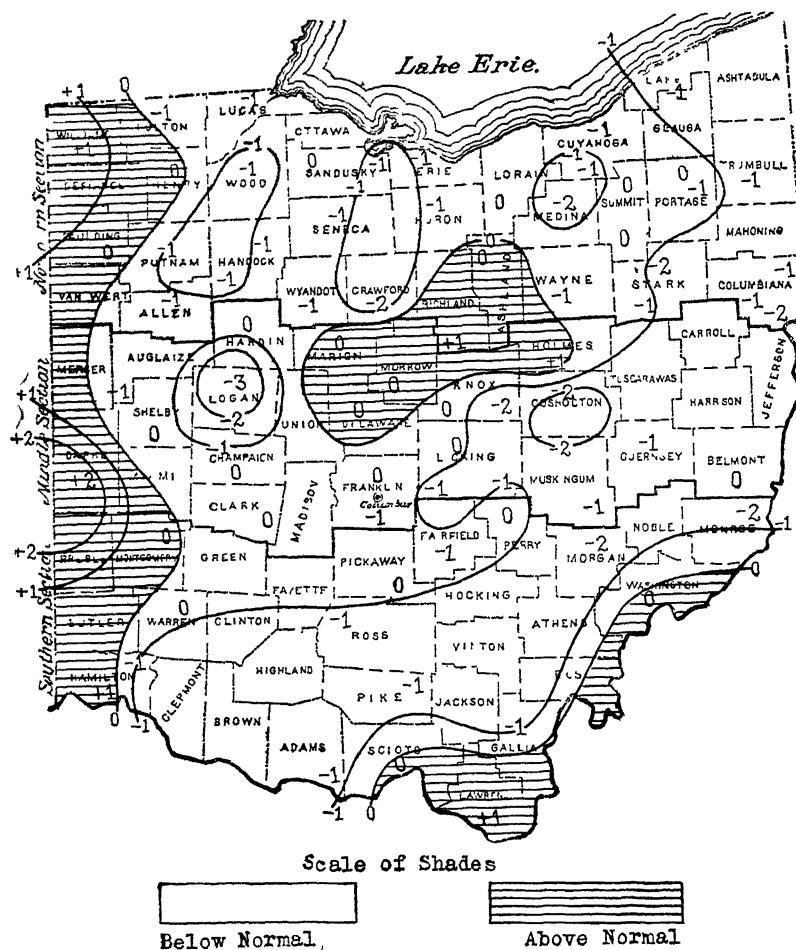


Figure 21. Temperature departures for May, 1913. The temperature for the state as a whole was 0.6° below normal, ranging from 2.6° below normal in Logan county to 2.2° above normal in Darke county. A narrow strip along the western edge of the state, portions of a few of the southeastern counties along the Ohio River, and a few of the north-central counties were above normal but all the rest were below normal.

Precipitation, May, 1913

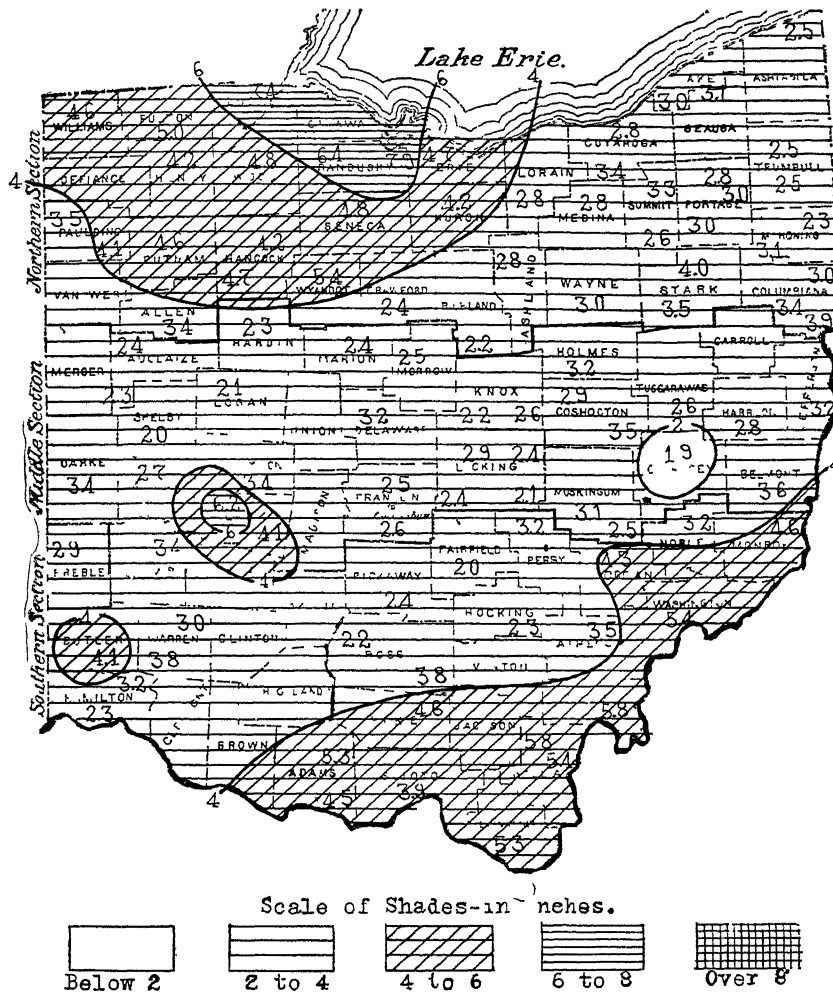


Figure 22. Precipitation for May, 1913. The average precipitation for the state as a whole was 3.53 inches., ranging from 7.94 inches in Sandusky county to 1.86 inch in Guernsey county. The first part of the month was comparatively dry, but during the remainder of the month showers were frequent, and in the northwestern and southeastern, as well as in Clark and in Butler counties, were heavy. At Toledo, in Lucas county, 3.57 inches fell in 24 hours, on the 26th and 27th. The rainfall in the latter part of the month hindered farm work greatly, especially delaying corn planting.

Precipitation departures, May, 1913

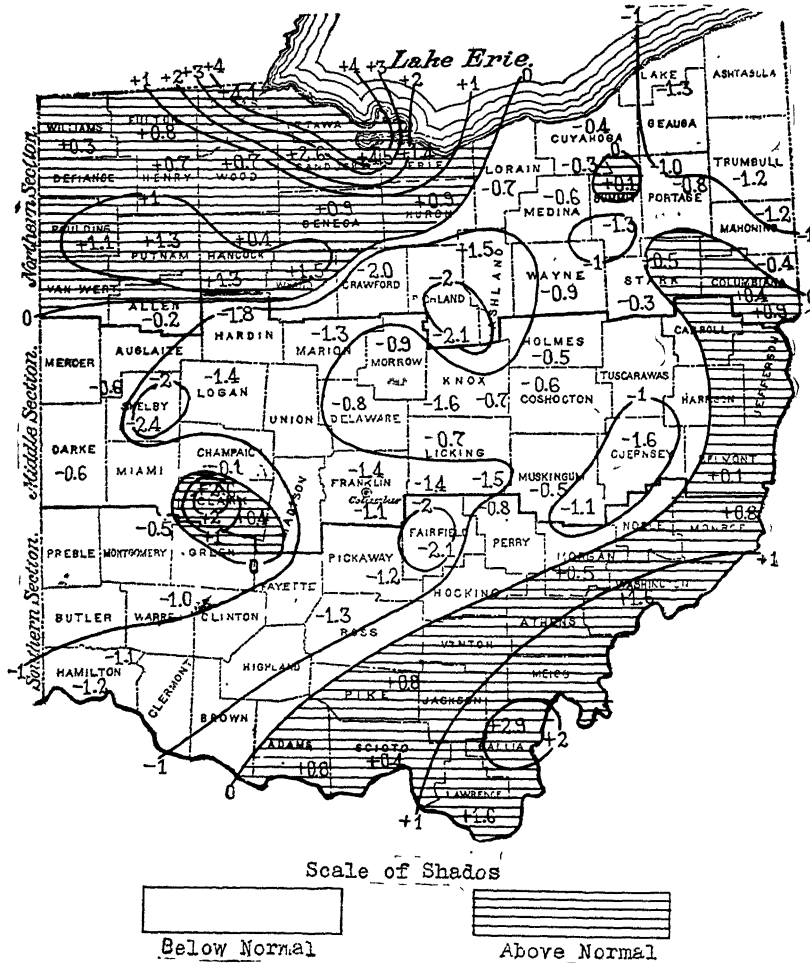


Figure 23. Precipitation departures for May, 1913. The precipitation for the state as a whole averaged 0.12 inch below the normal, ranging from 4.49 inches above normal in Sandusky county to 2.35 inches below normal in Shelby county. The average number of rainy days was 10.

Temperature departures, June, 1913

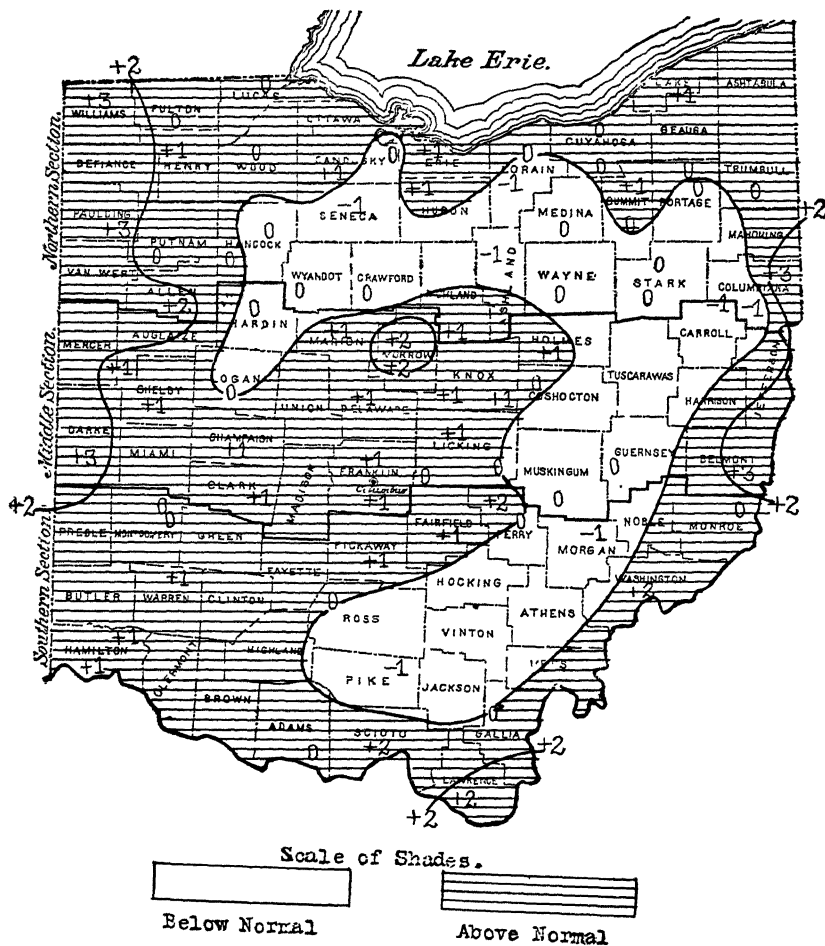


Figure 25. Temperature departures from the normal for June, 1913. The temperature was above normal for most stations throughout the state, ranging from 3.2° above normal in Columbiana county to 1.1° below normal, also in Columbiana county. The state as a whole was 0.6° above normal.

Precipitation, June, 1913



Figure 26. Precipitation during June, 1913. The average precipitation for the state as a whole was 1.87 inch, making this one of the driest Junes on record. Several stations reported less than one inch for the whole month, Lima being least with only 0.36 inch. Marietta had the heaviest precipitation, 4.94 inches. In nearly all instances the rainfall occurred with thunderstorms, and in many places these storms were severe, considerable damage being done by wind, lightning and hail.

Precipitation departures, June, 1913

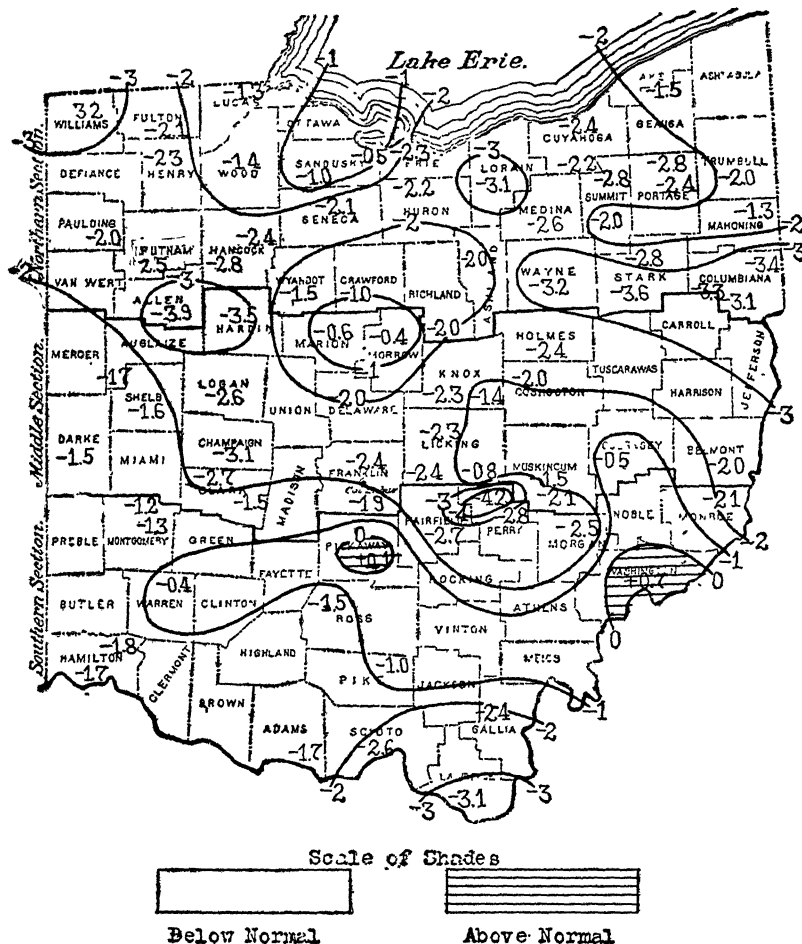


Figure 27. Departures from the normal precipitation for June, 1913. The precipitation for June was 2.04 inches below normal, ranging from 4.18 inches below normal in Perry county to 0.71 inch above normal in Washington county. The precipitation was above normal at only two stations in the whole state. The number of rainy days averaged 6.

Temperature departures, July, 1913

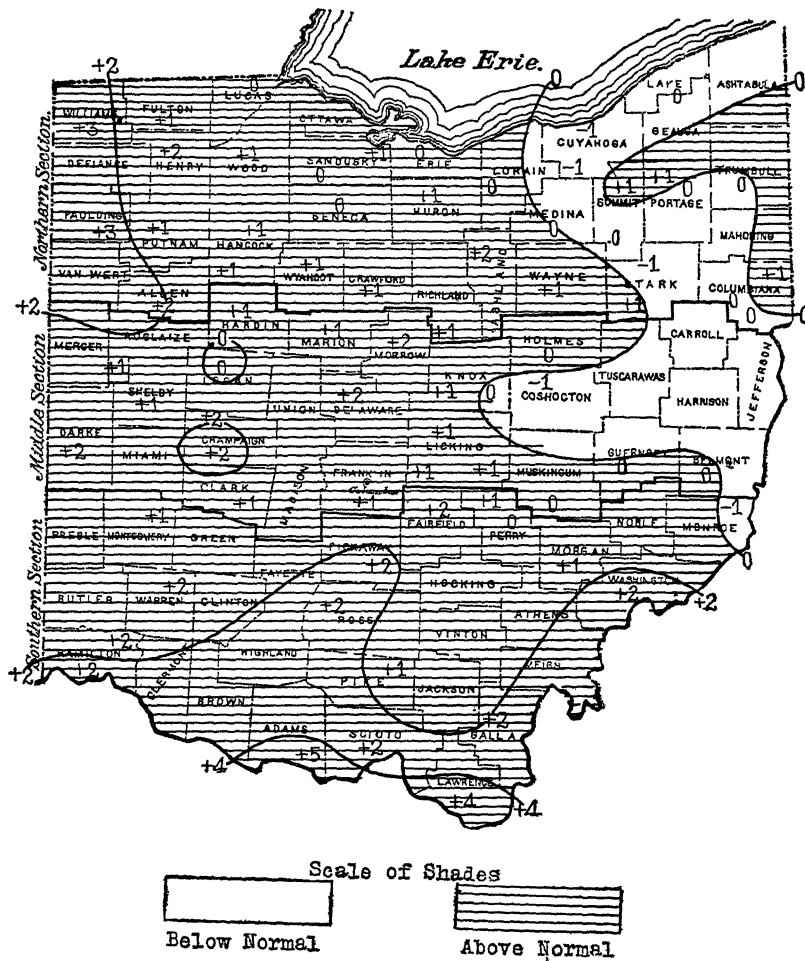


Figure 29. Temperature departures from the normal for July, 1913. The temperature was above normal at most stations throughout the state, ranging from 3.4° above normal in Paulding county to 0.8° below normal in Stark and Coshocton counties. The state as a whole averaged 1.0° above normal. The average number of clear days was 16, against an average of 12 partly cloudy, and 3 cloudy days. The percentage of sunshine was also above normal.

Precipitation, July, 1913

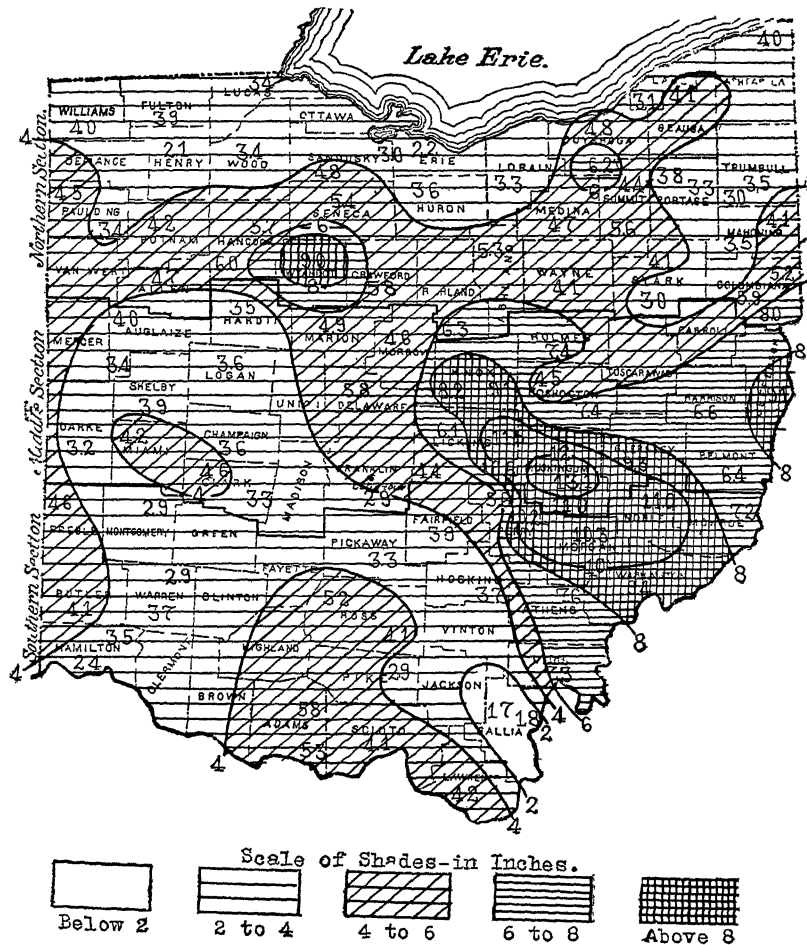


Figure 30. Precipitation during July, 1913. The average precipitation for the state as a whole was 5.20 inches, making this one of the wettest Julys on record. Only three times in the past thirty-one years has this precipitation average been greater. Thurman, in Gallia county, had the smallest monthly rainfall, reporting only 1.71 inch. Zanesville, in Muskingum county, reported 13.12 inches, considerably over half of which fell on the 14th and 15th of the month. On the night of the 13th and morning of the 14th an almost unprecedented rainfall for this state occurred over the Muskingum watershed, causing the lower Muskingum river to rise about 5 feet above flood stage. Also all the smaller streams overflowed their banks, some of them going higher than ever before. Heavy damage was done to crops, railroads, highways and bridges. Heavy rainfalls also occurred over the Sandusky river valley on the same date, and caused considerable damage. Several severe thunderstorms were reported in the state during the month, heavy loss resulting.

Precipitation departures, July, 1913

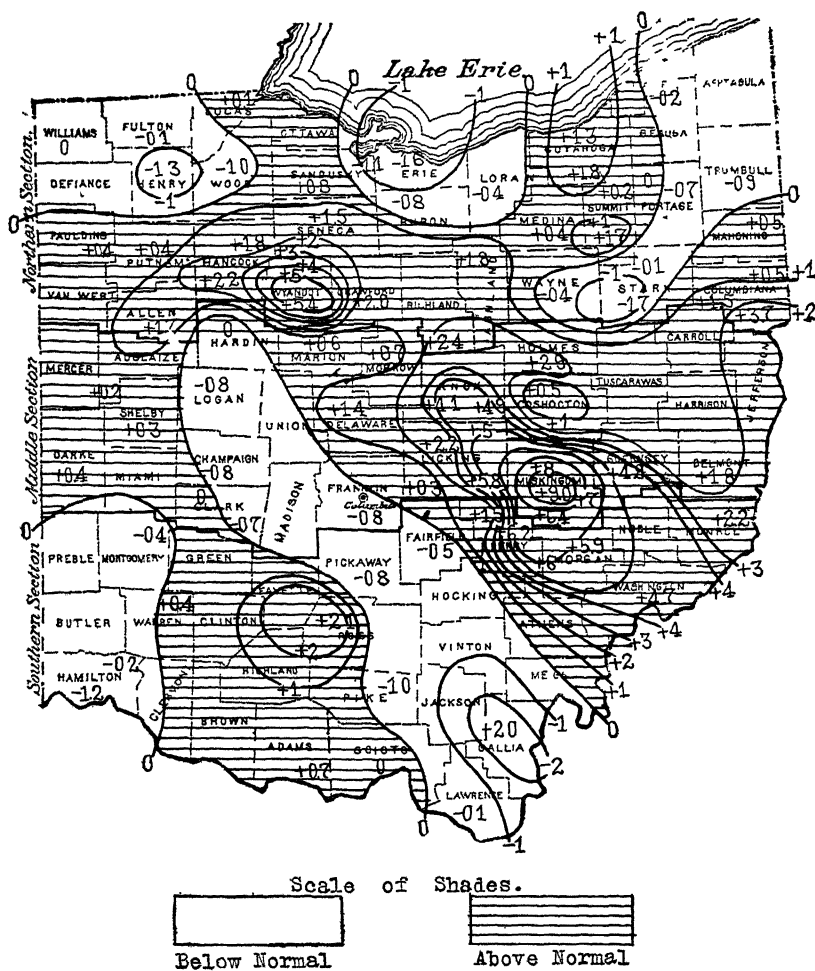


Figure 31. Departure from the normal precipitation for July, 1913. The precipitation for July averaged 1.11 inch above normal for the state as a whole, ranging from 8.97 inches above normal in Muskingum county to 2.03 inches below normal in Gallia county. The rainfall was mostly local, being excessive in a great many instances. The number of rainy days averaged 11.

Mean temperature, August, 1913



Temperature departures, August, 1913



Figure 33. Temperature departures. The mean temperatures for the stations in the state averaged 20° above the normal. The greatest excess in temperature occurred in southern and western counties and the least in the eastern counties.

Precipitation, August, 1913

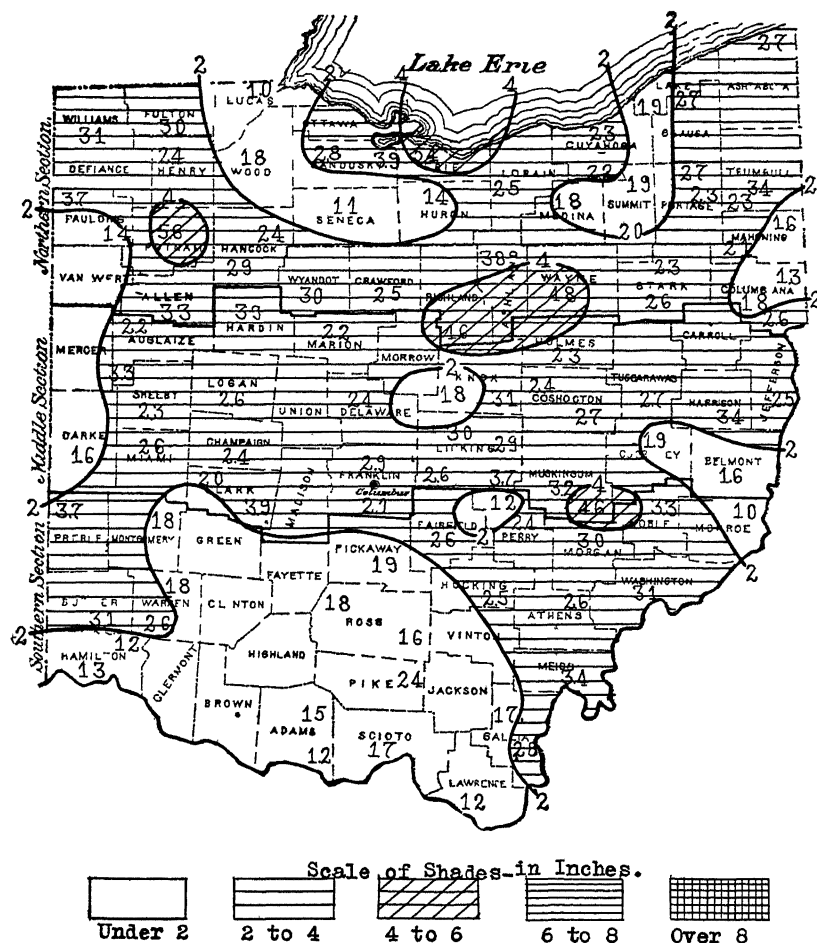


Figure 34. Precipitation for August, 1913. The average precipitation for the state as a whole was 2.52 inches. In general the greatest amount of rainfall occurred in the Muskingum and middle Maumee watersheds, and the least amount in several areas around the border of the state. The greatest amount recorded at one station was 5.57 inches at Ottawa, Putnam county, where there was a fall of 3.47 inches within 24 hours on the 21st and 22nd, and the least was 0.96 inch at Toledo. With the exception of the 21st and 22nd, the rains were generally scattered and light.

Mean temperature, September, 1913



Figure 36. Average temperature for September, 1913. The average temperature for the state as a whole was 64.1°. The highest temperature reported during the month was 102° at Hamilton on the 2nd, and the lowest was 26° at Green Hill and Toboso on the 23rd.

The month was characterized by unusual temperature extremes. The first 7 days were exceptionally hot and the 23rd was exceptionally cold. All previous high temperature records for September were broken during the first 3 days at 9 stations and equalled at 9 others, and the low temperature records for September were broken at 6 stations and equalled at 11 others, on the 23rd. From the 9th to the 28th, inclusive, the temperatures were generally below normal. Frost and freezing temperatures were general, except along the lake shore and the Ohio river on the 23rd. Frost occurred also quite generally on the 14th, and in scattered localities on the 10th, 11th, 27th and 28th.

Temperature departures, September, 1913

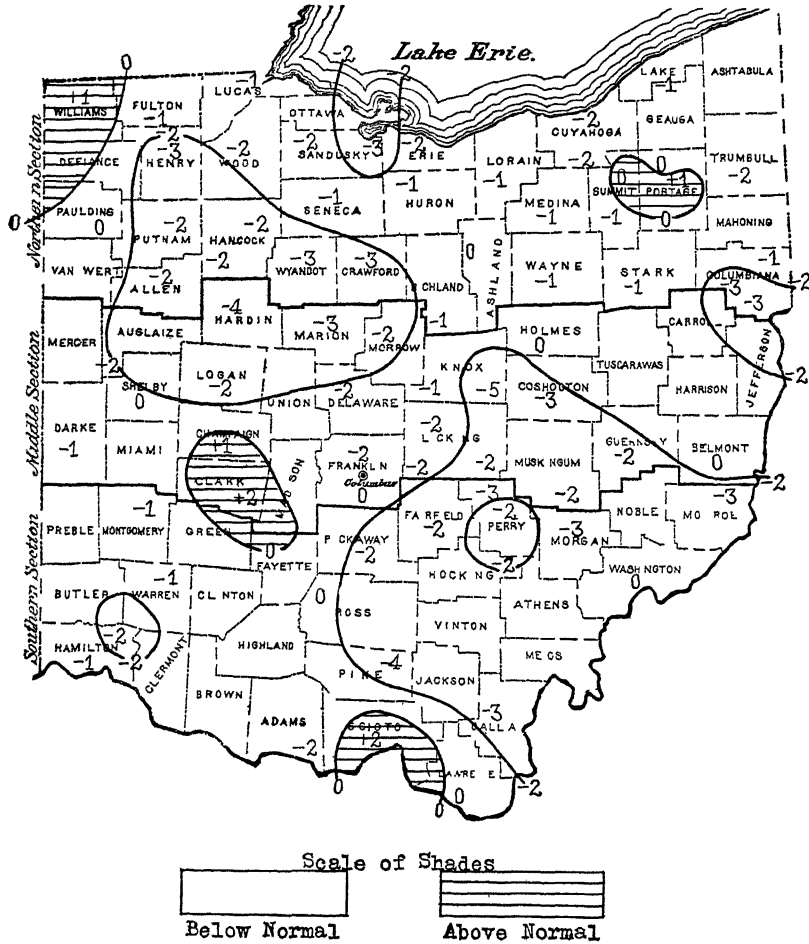


Figure 37. Temperature departures for September, 1913. The mean temperature for the stations in the state averaged 1.5° below the normal. It was below normal at practically all stations.

Precipitation, September, 1913



Mean temperature, October, 1913



Figure 40. Average temperature for October, 1913. The average temperature for the state as a whole was 54.1°. The highest temperature for the month was 96° at Demos, Belmont county, on the 7th, and the lowest was 18° at Milligan, Perry county, on the 22nd.

The weather was generally warm and pleasant during the first 17 days and cold, wet and disagreeable the remainder of the month. It was unusually warm from the 6th to the 10th, inclusive, the temperature reaching 90° at a number of stations. The coldest periods were the 19th-22nd and 30th-31st. On the 22nd the temperature fell considerably below the freezing point in all parts of the state, bringing the crop season to a close.

Temperature departures, October, 1913

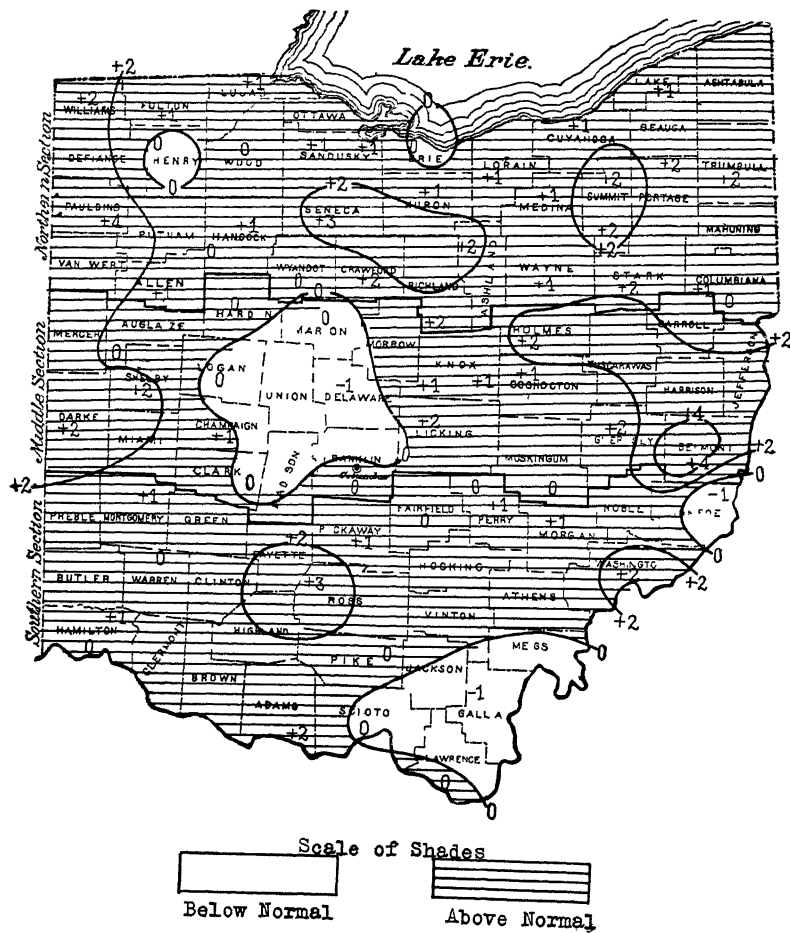


Figure 41. Temperature departures for October, 1913. The average temperature for the state was 1.1° above the normal. The greatest excesses in temperature occurred in northern and eastern counties and the greatest deficiencies occurred in some of the middle and southern counties.

Precipitation, October, 1913



Figure 42. Precipitation for October, 1913. The average precipitation for the state as a whole was 3.36 inches. It was heaviest in northern and extreme eastern counties and lightest in the lower Scioto valley. The monthly totals ranged from 6.51 inches in Lake county to 1.43 inch in Ross county. There were but two rainy periods during the first half of the month and they occurred on the 1st and 2nd, and 11th and 12th. But during the last two weeks rain fell in some part of the state on every day. The average number of rainy days was 12, clear days 10, partly cloudy days 7, and cloudy days 14.

Snowfall, October, 1913



Figure 44. Snowfall for October, 1913. The average snowfall for the state was 0.3 inch. It ranged in amounts from 6.0 inches in Lake county to only flurries in some of the southern counties. Snow fell in the state on the 21st, 22nd, 28th, 30th and 31st.

Mean temperature, November, 1913

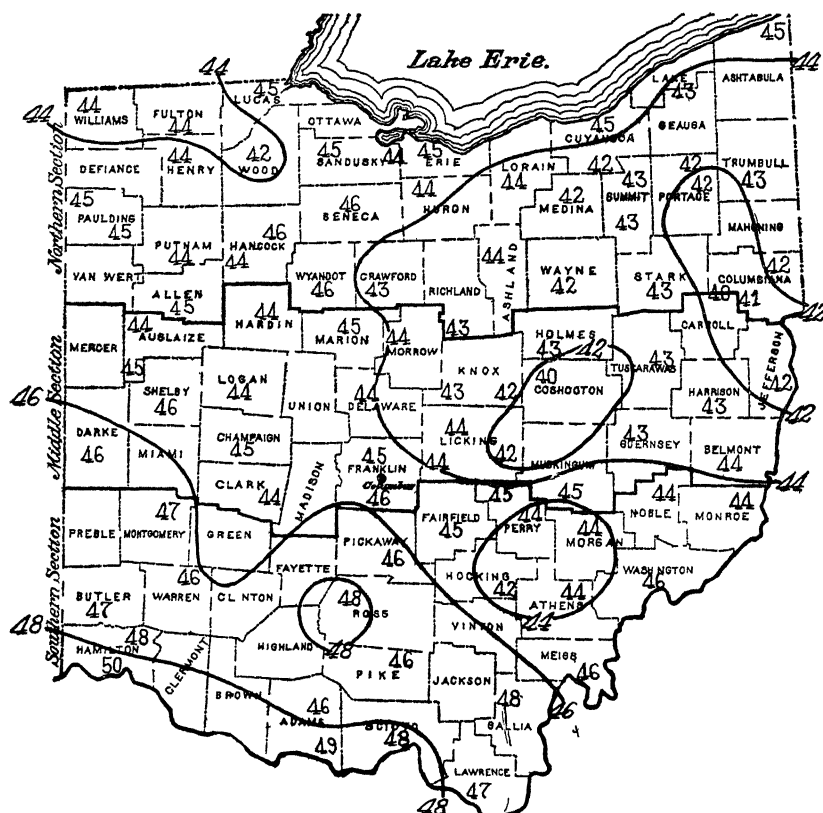


Figure 45. Average temperature for November, 1913. This was one of the warmest Novembers in Ohio of which there is record. The mean temperature for the state as a whole was 44.4°. The month opened cool, and with the exception of the 6th and 7th, the temperature was below normal continuously until the 13th. The temperature was above normal continuously during the last 13 days, and during a part of this time it was unseasonably high. The 20th and 22nd were among the warmest November days in Ohio of which there is record. The mean temperature for the 22nd was 29° above the normal at Toledo, 28° above at Cleveland, 25° above at Columbus and 26° above at Cincinnati. The lowest temperature for the month at most stations occurred on the 12th. It was unusually cold on that date for so early in the month, especially in the Muskingum valley, where at 2 stations it fell to 2° above zero.

Precipitation, November, 1913

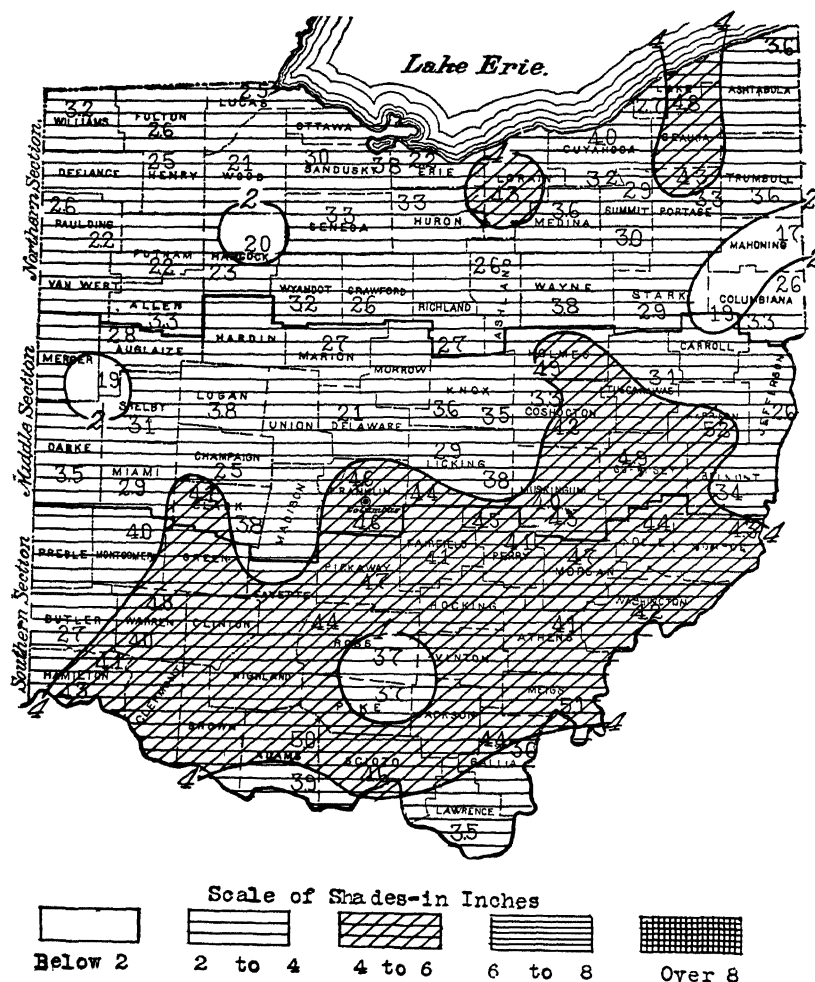
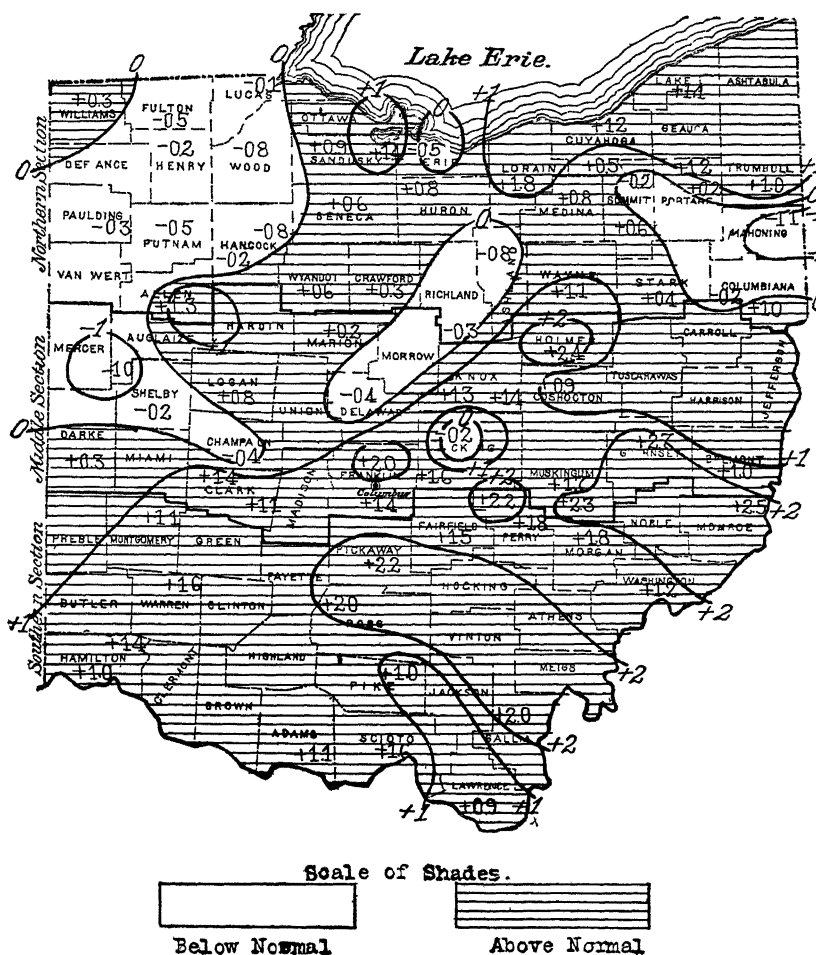


Figure 47. Precipitation for November, 1913. The average amount of precipitation for the state as a whole was 3.52 inches. It was heaviest in the southern counties and lightest in a few of the extreme eastern counties and middle-western counties. The monthly totals ranged from 5.21 inches in Harrison county to 1.66 inch in Mahoning county. There was much cloudiness, and precipitation occurred frequently during the last three weeks, especially in the southern districts. The average number of rainy days was 11; clear days, 10; partly cloudy days, 6; cloudy days, 14. Dense fog prevailed on the 27th, 28th and 29th.

Precipitation departures, November, 1913



Snowfall, November, 1913

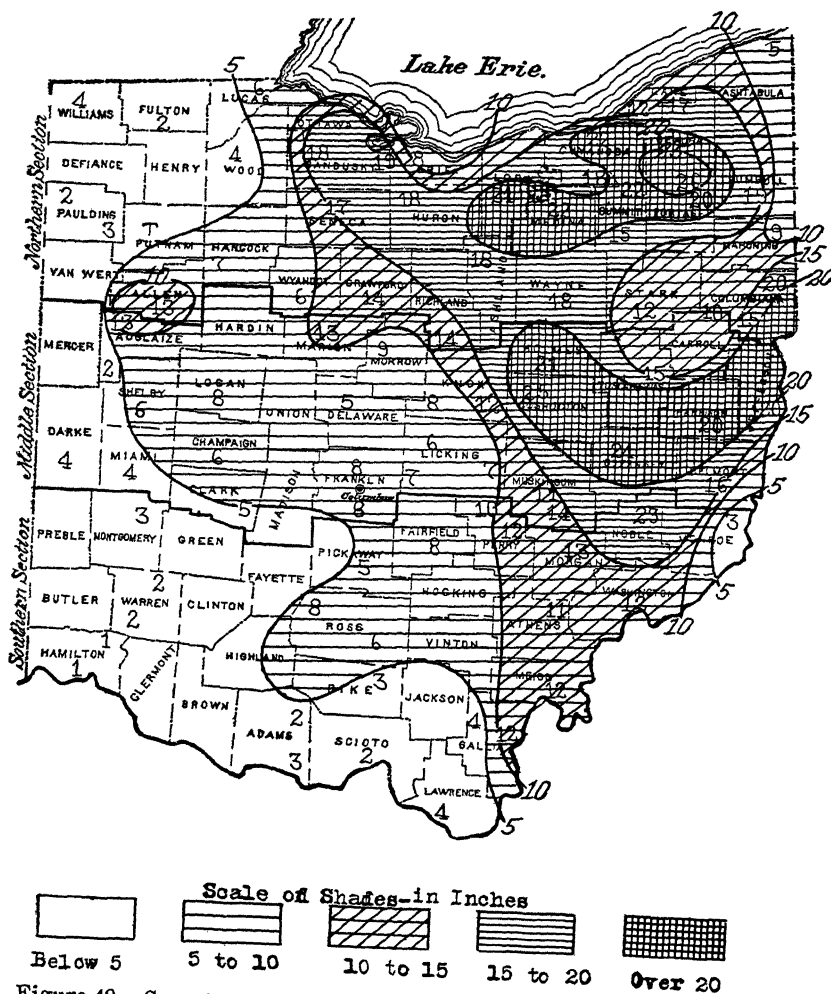


Figure 49. Snowfall for November, 1913. The snowfall was greater than for any other November of which there is record in Ohio. The average for the state was 10.8 inches. It practically all fell during the great snowstorm of the 9th and 10th. In parts of the Cuyahoga and Muskingum valleys the total fall was about 25 inches. It gradually decreased towards the west and in Hamilton county it was only about one inch.

Mean temperature, December, 1913



Figure 50. Average temperature for December, 1913. The month was considerably warmer than usual. The mean temperature for the state as a whole was 34.5°. The temperature was generally above normal during the first 6 days and from the 12th to the 24th, inclusive. It was much above normal on the first 4 days and on the 12th, 13th and 14th. Moderately cold weather was experienced on the 8th and 9th and during the last week; but there were no extremely cold days. The temperature fell to slightly below zero at several places in eastern Ohio on the 28th. There were no sudden temperature changes of importance during the month and the daily changes in temperature were exceptionally small.

Temperature departures, December, 1913

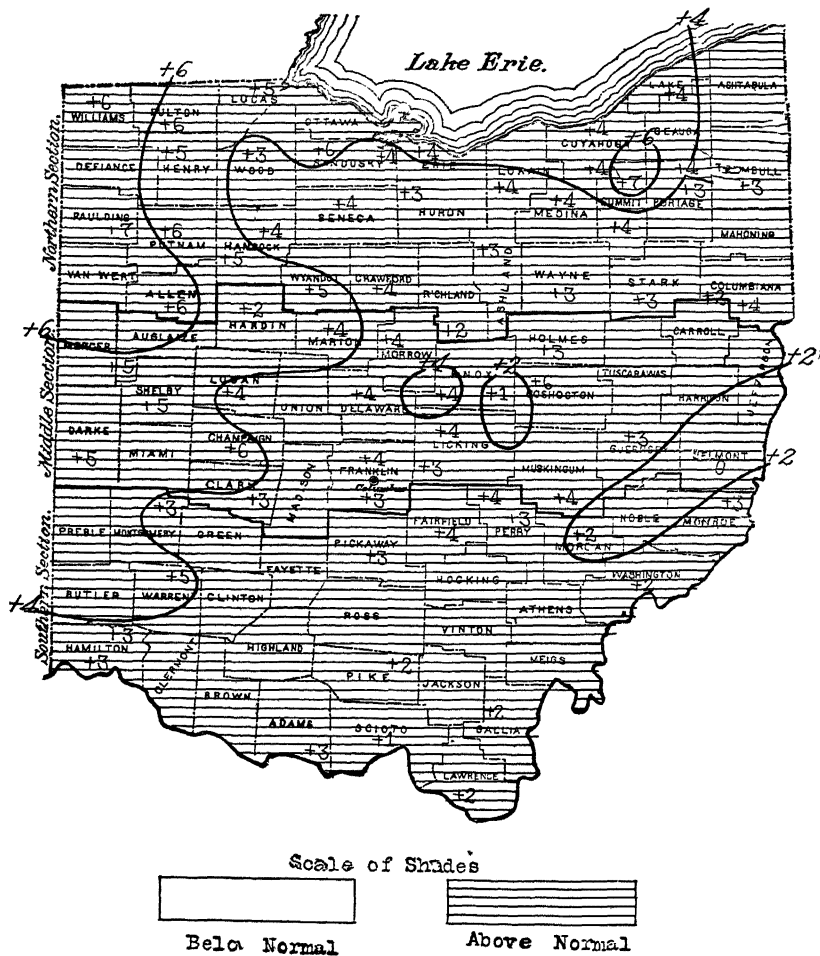


Figure 51. Temperature departures for December, 1913. The temperature for the state as a whole averaged 3.7° above the normal. In general the greatest excess in temperature occurred in northern and western counties, so that the mean temperatures for the stations in the northern part of the state were nearly as high as for those in the extreme southern counties.

Precipitation, December, 1913



Figure 52. Precipitation for December, 1913. The average amount of precipitation for the state as a whole was 1.68 inch. In general the precipitation was heaviest in the extreme southern and southeastern counties and lightest in the middle western counties. There were no heavy rains during the month and the number of days on which precipitation occurred were fewer than usual.

Precipitation departures, December, 1913

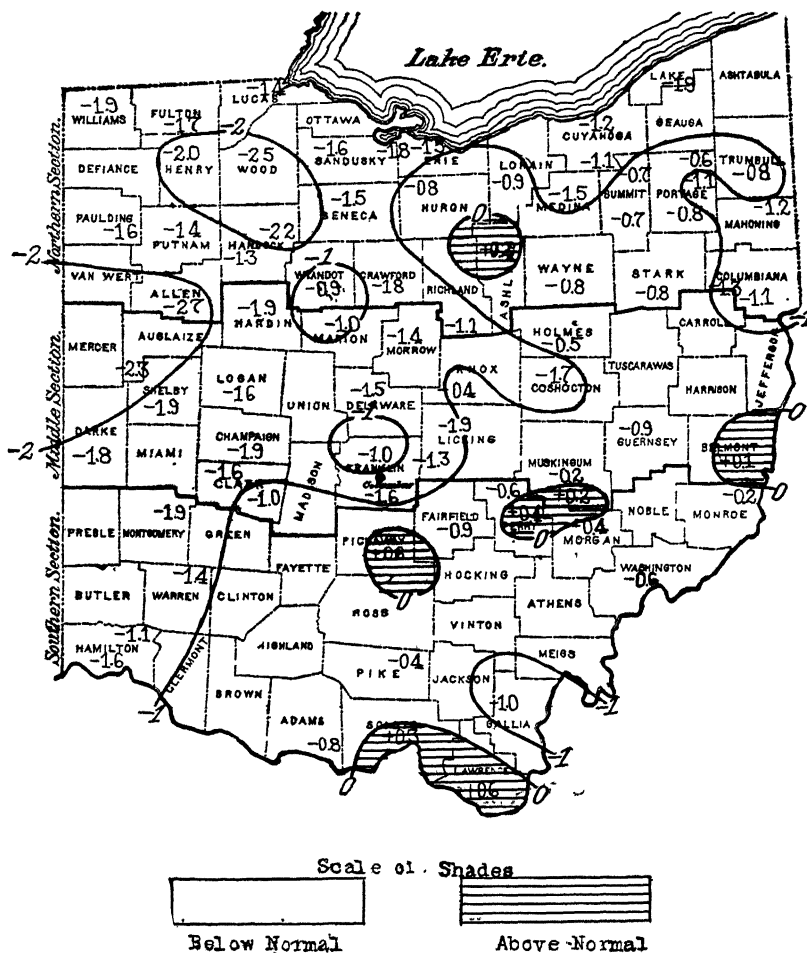


Figure 53. Precipitation departures for December, 1913. The average amount of precipitation for the state was 1.16 inch below the normal. The precipitation was deficient at nearly all reporting stations. The greatest excess was 0.6 inch at Circleville, Pickaway county, and Ironton, Lawrence county. The greatest deficiency was 2.7 inches at Lima, Allen county.

Snowfall, December, 1913

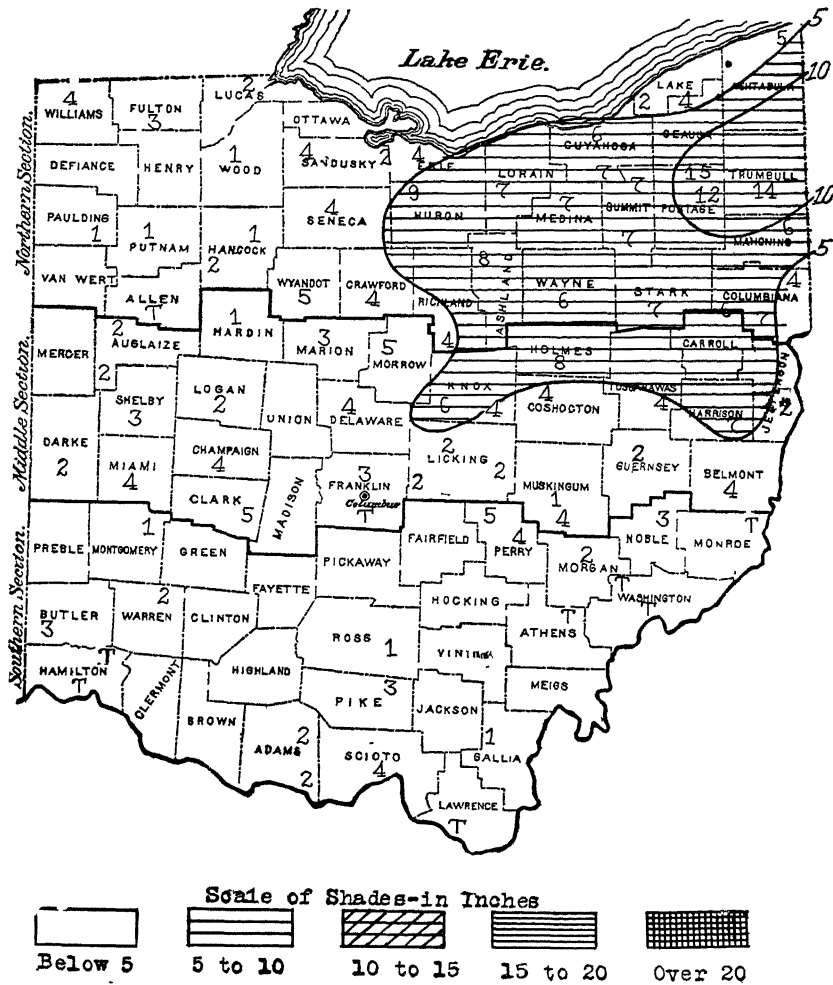


Figure 54. Snowfall for December, 1913. There was less snowfall than usual in nearly all counties. The monthly totals ranged from 15 inches in Portage county to only traces in some of the extreme southern counties. The average for the state as a whole was 3.7 inches. Most of the snow fell on the 7th, 8th, 25th and 26th.

CLIMATOLOGICAL DATA FOR OHIO FOR THE YEAR 1913.

	Monthly mean	Departure from normal	Highest	Date	Lowest	Date	Range	Greatest daily range	Average precipitation	Departure from normal	Average snowfall	Number of rainy days	Number of clear days	Number of partly cloudy days	Number of cloudy days
January.....	36.0	+7.8	70	20*	3	9	67	42	7.01	+4.17	8.6	17	7	6	18
February.....	26.7	-0.5	77	21	-15	6	91	50	1.94	-0.77	6.9	8	12	6	10
March.....	40.1	+0.9	80	14	-8	8	88	58	8.40	+5.28	5.1	13	11	9	11
April.....	50.0	+0.6	90	25	18	21	72	52	3.35	+0.30	T	10	14	6	10
May.....	60.3	-0.6	95	4	23	11*	72	54	3.53	-0.12	0	10	14	8	9
June.....	69.8	+0.6	105	30	29	10	76	48	1.87	-2.04	0	6	20	7	3
July.....	74.5	+1.0	103	29*	40	11	63	44	5.20	+1.11	0	11	16	12	3
August.....	73.3	+2.0	102	9	39	25	63	48	2.52	-0.64	0	6	17	10	4
September.....	64.1	-1.5	102	2	26	23	76	50	2.37	-0.41	T	9	14	7	9
October.....	54.1	+1.1	96	7	18	22	78	51	3.36	+0.95	0.3	12	10	7	14
November.....	44.4	+3.7	78	7*	2	12	76	51	3.52	+0.83	10.8	11	10	6	14
December.....	34.5	+3.7	65	2*	-3	28	67	38	1.68	-1.16	3.7	7	8	6	17

*On other dates also.

METEOROLOGICAL SUMMARY FOR 1913

By C. A. PATTON

EXPLANATION OF TABLES

The following tables contain statistics of temperature, rainfall, etc., for the year, and are compiled from data obtained from daily observations. T stands for "trace"—less than .01 inch of rainfall. Temperature is given in degrees Fahrenheit.

Table I shows the daily rainfall at the Experiment Station at Wooster during the year in inches and hundredths.

Table II shows the daily mean temperature for each day of 1913 and the monthly mean temperature with the 26 years' average.

Table III gives the monthly mean temperature at the station with the 26 years' average for the same.

Table IV gives the monthly mean rainfall at the station with the 26 years' average for the same.

Table V gives the monthly mean temperature for the state for 1913 with 26 years' average.

Table VI gives the monthly mean rainfall for 1913 with the 26 years' average for the state.

Table VII gives the monthly mean temperature and rainfall for the station and state for 1913 with the 26 years' average.

Table VIII contains the mean temperature, the highest and lowest temperatures with the range of temperature for each month; the number of clear, partly cloudy and cloudy days; the rainfall, snowfall and prevailing direction of wind, for both the station and state for 1913.

Table IX contains the principal points of interest on temperature, rainfall, and state of weather at the station during the year, and a grand summary for 26 years.

Table X contains the principal points of interest on temperature, rainfall, and state of weather for the state during the year and a grand summary for 31 years.

Table XI gives the highest and lowest temperature for each month during the past 26 years for both the station and state.

Table XII gives the total and average precipitation at the different district test farms.

Some slight errors in previous publications of tables five, nine and eleven are corrected in this report.

NOTES ON THE WEATHER AT WOOSTER 1913
SUMMARY BY MONTHS

LATITUDE 40° 47' 01", LONGITUDE 81° 55' 48"
ELEVATION ABOVE SEA LEVEL 1,030 FEET

JANUARY

The mean temperature was 34.2° this being 6.6° above the average for this month. The precipitation was more than double the average amount for January, being 7.86 inches. The highest temperature recorded was 57° on the 20th and the lowest was 4° on the 5th. Two heavy snows during the month, both melting off in a few days.

FEBRUARY

The mean temperature was 25.1° which is 1.3° below the average for February. The highest temperature 62° occurred on the 19th. The lowest —2° on the 6th. The precipitation was 2.43 inches, which is slightly below the average for this month. The snowfall for the month amounted to 11.50 inches.

MARCH

The mean temperature for March was above the average, a very severe windstorm on the 21st lasting all day, doing much damage to roofs, fences, etc. Followed on the 23rd by the beginning of the most destructive flood in the history of the county. The rainfall in five days amounting to 10.15 inches. The total precipitation for the month was 11.84 inches, which is 8.10 inches above the average for March.

APRIL

The mean temperature was 48.9 which is slightly above the average for April. The highest temperature 83° occurred on the 25th, the lowest 20° on the 21st. The rainfall was 3.66 inches. This is .65 inch above the average for April. The prevailing wind was from the northwest.

MAY

The mean temperature for May was 58.0, which is 6° below the average for this month. The highest temperature recorded was 86° on the 5th and the lowest was 25° on the 11th. The rainfall was almost one inch below the average.

JUNE

The mean temperature was 67.4° , this is mean for the past twenty-six years for June. Very cold north winds on the 8th and 9th followed by a killing frost on the 10th, doing much damage to corn and early garden truck on low lands. The rainfall was far below the average, being only 97 inch.

JULY

The mean temperature for the month was 72.4° which is 1° above the average for this month. The rainfall was 4.07 inches, which is very slightly below the average for July. The month was noted for its many extremely warm days, and numerous electrical storms, some rain falling on sixteen days.

AUGUST

The mean temperature for August was 71.5° degrees which is 2.1° above the average. The highest temperature recorded was 96° on the 17th. The lowest was 45° on the 25th. The rainfall was 1.19 inch above the average. The total fall was 4.75 inches.

SEPTEMBER

The mean temperature for September was below the average, the highest 93° , occurred on the 2nd and 3rd, the lowest 28° , on the 23rd. A light frost on the 14th injuring tender plants and vegetation. A killing frost on the 23rd. The total rainfall was 3.70 inches which is .35 inch above the average for September.

OCTOBER

The weather for the first half of October was very fine. The mean temperature was 1° above the average for the month. The total rainfall was 3.17 inches. The highest temperature recorded was 81° on the 6th, 9th and 10th. The lowest 24° occurred on the 22nd.

NOVEMBER

The mean temperature for November was 2.4° above the average for the month. The highest 73° occurred on the 22nd and the lowest 12° on the 12th. A terrific snow blizzard from the northwest and lasting two days and nights without ceasing occurred on the 9th and 10th. The total fall was estimated at 18 inches, drifting to a depth of six or eight feet in places. Roads were impassible for several days. The total precipitation was 3.77 inches.

DECEMBER

The mean temperature was 33.7 which is 3° above the average for December. The highest temperature recorded was 56° on the 2nd. The lowest 7° , on the 28th. The total precipitation was 1.92 inches, which is below the average for this month.

METEOROLOGY—TABLE I—RAINFALL
DAILY RAINFALL AND MELTED SNOW FOR 1913 AT THE EXPERIMENT STATION

Date	January	February	March	April	May	June	July	August	September	October	November	December	Date
1.....	...	...	.20	...	...	.18	.42	...	...	.40	...	.32	1
2.....	...	...	...	1.04	...	..	.03	..	...	.48	...	...	2
3.....	.50	.40	...	.04	...	T	...	...	...	.14	...	.02	3
4.....	.20	...	.35	.60	...	.05	...	.18	T	...	...	...	4
5.....	.20	...	.07	T	...	...	.50	...	...	...	...	...	5
6.....	.10	...	.20	...	T	...	.30	...	...	...	...	.05	6
7.....	.86	...	...	...	...	.02	...	...	T	...	.05	.30	7
8.....	.52	...	...	...	...	...	...	.06	.03	...	.63	.20	8
9.....	...	...	T	T	.02	...	.02	...	...	...	1.00	...	9
10.....	.09	...	T	.24	...	...	...	.45	...	...	.80	T	10
11.....	.83	T	.10	.17	...	...	...	...	...	.37	T	...	11
12.....	.40	T	...	...	...	...	.30	.50	...	.03	...	...	12
13.....	...	...	...	.31	...	...	.58	...	...	...	.50	...	13
14.....	...	...	...	T	...	...	.39	...	...	...	.40	...	14
15.....	.02	...	...	.01	.57	...	.04	...	...	...	.03	...	15
16.....	.62	...	.05	...	...	...	...	...	.18	...	.04	...	16
17.....	.75	.40	.05	...	...	...	.05	...	2.20	.20	...	...	17
18.....	.23	...	...	...	...	...	...	1.65	.29	.02	.05	T	18
19.....	...	...	...	...	...	...	.01	...	...	.15	T	...	19
20.....	.80	...	...	...	...	.65	.20	...	.60	.26	...	...	20
21.....	.07	...	.40	...	.10	.05	...	1.35	T	.02	...	.18	21
22.....	...	.23	...	...	.15	...	...	.50	.12	.06	...	...	22
23.....	.80	...	1.16	...	.03	...	.20	...	...	T	...	.45	23
24.....	...	.05	1.94	...	...	...	.07	...	...	.81	...	...	24
25.....	...	...	4.84	...	...	.02	...	...	...	...	...	.10	25
26.....	...	.35	1.40	.47	.70	...	...	...	.02	...	.07	.30	26
27.....	...	.70	.81	.27	1.30	...	.84	...	...	...	T	...	27
28.....	.60	.30	...	.45	T	...	...	...	...	.05	.10	...	28
29.....	.02	...	...	.06	T	...	...	.06	.25	.10	.10	...	29
30.....	...	...	...	...	.17	...	.12	...	.01	.08	T	...	30
31.....	.25	...	.27	...	...	...	...	...	...	T	...	...	31
Total	7.86	2.43	11.84	3.66	3.04	.97	4.07	4.75	3.70	3.17	3.77	1.92	
Average.....	.254	.087	.382	.122	.098	.032	.131	.153	.123	.102	.126	.062	

METEOROLOGY—TABLE II—TEMPERATURE
MEAN TEMPERATURE FOR EACH DAY OF 1913, AT THE EXPERIMENT STATION

Date	January	February	March	April	May	June	July	August	September	October	November	December	Date
1.....	31.5	14.0	26.0	45.0	57.5	64.5	81.5	75.5	72.5	63.0	33.0	51.0	1
2....	39.0	14.5	15.5	42.5	59.0	61.5	76.5	68.5	75.5	55.0	35.0	50.5	2
3.....	34.0	26.0	27.5	52.5	76.0	63.0	75.5	71.5	76.5	53.5	42.0	46.5	3
4.....	22.0	18.0	33.5	56.5	67.0	61.0	86.5	70.5	75.0	55.0	45.0	42.0	4
5.....	17.0	10.0	21.5	41.0	68.0	57.0	76.0	64.5	74.0	59.0	40.5	43.0	5
6.....	39.0	6.5	20.5	38.5	67.0	67.5	70.0	67.5	75.5	66.0	44.0	39.0	6
7.....	35.5	13.0	11.0	33.0	50.0	66.0	60.5	74.0	77.0	64.5	53.5	36.5	7
8.....	36.5	18.5	28.5	35.5	50.5	50.5	66.0	72.0	71.0	66.5	47.0	23.0	8
9.....	20.5	20.0	47.5	41.0	52.0	47.5	72.5	80.5	58.5	68.5	32.5	23.0	9
10.....	28.0	18.0	39.0	49.0	40.5	49.5	67.5	83.0	58.0	68.5	23.5	30.0	10
11.....	43.0	24.5	38.5	53.0	40.0	54.0	62.0	71.5	60.0	60.5	25.5	31.0	11
12.....	35.5	14.5	41.5	43.0	46.0	58.0	75.5	69.5	59.5	48.5	27.5	36.0	12
13.....	23.0	12.0	54.5	42.5	62.0	62.0	76.5	72.5	53.0	45.5	46.0	42.5	13
14.....	27.5	24.5	64.0	47.0	58.0	66.0	73.0	73.0	50.0	48.5	42.0	41.5	14
15.....	35.5	33.5	52.5	48.5	56.0	70.5	70.5	78.5	56.5	56.5	30.5	32.5	15
16.....	44.0	32.5	28.5	50.0	65.0	80.5	68.0	78.0	61.0	61.0	36.5	36.5	16
17.....	50.0	30.0	26.0	51.0	60.0	75.0	77.0	80.5	66.0	58.0	30.5	37.0	17
18.....	42.5	27.0	44.0	63.0	64.0	68.5	75.0	79.0	61.5	53.0	44.5	32.5	18
19.....	35.5	46.5	53.0	55.5	52.0	72.5	72.0	74.0	59.5	43.0	55.5	28.5	19
20.....	45.0	48.5	59.5	37.0	56.0	76.0	68.0	72.5	64.5	40.0	58.5	31.0	20
21.....	26.5	44.5	51.5	40.0	67.0	74.0	65.5	73.0	54.5	36.0	58.0	33.0	21
22.....	29.5	44.5	31.0	60.5	64.5	62.0	66.0	72.0	45.5	35.5	63.0	28.5	22
23.....	42.5	28.5	37.5	70.0	54.5	65.0	70.5	64.0	45.0	54.5	54.0	31.0	23
24.....	41.0	18.0	49.5	60.0	55.0	74.5	71.5	63.0	58.0	51.0	40.5	36.0	24
25 ...	35.5	26.0	49.5	64.0	55.5	78.5	62.5	60.5	62.5	50.0	34.5	33.0	25
26.....	43.0	28.5	45.5	62.0	51.0	81.0	68.5	69.0	62.5	52.0	41.5	29.0	26
27.....	37.0	33.5	28.5	47.0	58.0	80.5	74.5	68.0	51.0	46.5	43.5	20.5	27
28.....	25.0	27.5	26.0	42.0	61.0	80.0	80.0	69.0	54.0	43.0	44.5	18.5	28
29.....	26.0	....	42.5	47.5	60.5	74.5	78.0	72.0	65.0	44.0	47.5	27.0	29
30.....	37.0	....	52.0	48.0	65.5	82.0	80.5	62.0	71.0	37.5	52.0	25.0	30
31.....	34.0	....	48.5	....	58.5	....	77.0	66.0	....	34.5	....	29.0	31
Monthly mean.	34.2	25.1	38.5	48.9	58.0	67.4	72.4	71.5	62.5	52.2	42.4	33.7	
26-yr. average.	27.6	26.4	37.3	48.1	58.6	67.4	71.4	69.4	64.0	51.2	40.0	30.6	

METEOROLOGY—TABLE III
MONTHLY MEAN TEMPERATURE FOR TWENTY-SIX YEARS AT WOOSTER
Temperature in degrees Fahrenheit

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
1888.....	23.0	28.8	31.7	46.3	57.7	68.9	70.1	67.8	57.1	44.9	40.7	31.4	47.4	1888
1889.....	31.1	22.9	38.7	47.1	57.8	64.5	70.0	66.0	60.8	45.3	39.3	40.7	48.6	1889
1890.....	36.0	36.6	30.9	48.4	56.0	69.8	70.5	65.8	59.6	50.0	41.3	28.8	49.5	1890
1891.....	30.0	34.0	32.0	49.0	52.0	68.0	68.0	71.0	68.0	49.0	38.0	37.0	49.7	1891
1892.....	22.0	33.0	33.0	47.0	57.0	70.0	70.0	69.0	61.0	49.0	38.0	28.0	48.0	1892
1893.....	18.0	28.0	38.8	50.1	57.6	69.3	72.0	67.9	63.2	52.3	37.7	30.9	48.7	1893
1894.....	32.8	26.7	43.5	50.5	57.5	67.9	71.4	69.2	66.1	52.3	36.5	32.9	50.6	1894
1895.....	21.9	17.9	32.4	49.5	59.4	69.9	68.6	70.9	66.5	44.2	40.4	32.8	47.8	1895
1896.....	27.9	29.2	29.8	54.6	64.5	65.6	70.2	68.5	60.6	45.8	44.4	30.6	49.3	1896
1897.....	24.0	30.0	39.3	47.2	53.4	64.3	73.2	67.0	66.7	55.9	40.7	31.8	49.4	1897
1898.....	31.6	27.4	43.3	45.3	58.2	68.7	74.5	71.1	66.2	52.6	38.4	27.9	50.4	1898
1899.....	26.6	21.3	35.0	52.1	60.0	69.4	70.0	71.0	61.6	55.0	43.2	29.0	49.5	1899
1900.....	30.2	25.0	31.8	47.8	61.5	68.5	72.6	74.0	67.1	58.9	40.6	30.7	50.7	1900
1901.....	28.3	20.0	39.1	45.2	57.9	69.1	75.9	71.6	63.3	51.7	36.6	26.1	48.7	1901
1902.....	26.3	21.4	41.2	46.2	61.2	65.6	73.0	66.4	62.7	53.9	47.3	28.7	49.5	1902
1903.....	24.4	29.0	45.7	48.0	62.2	63.0	71.8	68.8	64.4	58.2	36.8	21.7	49.1	1903
1904.....	18.6	20.5	37.6	42.8	59.4	67.0	69.8	66.7	64.2	50.4	39.6	28.1	47.1	1904
1905.....	22.6	19.8	41.2	46.8	59.2	68.0	71.6	70.0	63.8	51.0	38.3	33.1	48.8	1905
1906.....	35.9	25.8	30.2	51.9	59.9	68.8	71.0	74.2	67.7	51.4	40.4	31.2	50.7	1906
1907.....	30.8	24.6	44.9	41.7	52.8	64.6	69.9	68.6	65.0	47.4	38.5	32.1	48.4	1907
1908.....	28.7	26.8	43.1	50.1	62.2	68.1	72.4	69.0	66.4	53.0	41.0	31.7	51.0	1908
1909.....	31.7	33.6	35.9	48.4	57.9	69.3	69.6	70.4	62.2	47.8	48.3	25.2	50.0	1909
1910.....	26.7	23.8	47.2	50.2	54.7	64.3	72.6	70.9	65.3	54.9	34.8	24.4	49.2	1910
1911.....	31.3	33.8	35.0	46.5	63.5	68.9	71.7	70.6	65.2	51.8	36.7	34.7	50.8	1911
1912.....	16.6	20.5	30.3	50.0	61.1	64.6	71.6	67.1	65.6	52.4	41.0	33.1	47.8	1912
1913.....	34.2	25.1	38.5	48.9	58.0	67.4	72.4	71.5	62.5	52.2	42.4	33.7	50.6	1913
26-yr. av...	27.6	26.4	37.3	48.1	58.6	67.4	71.4	69.4	64.0	51.2	40.0	30.6	49.3	

METEOROLOGY—TABLE IV
MONTHLY RAINFALL FOR TWENTY-SIX YEARS AT WOOSTER
Rainfall—Inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Date
1888.....	3.34	2.43	3.34	2.48	3.82	2.31	4.54	4.35	1.92	3.18	4.95	1.39	38.05	1888
1889.....	4.33	2.42	2.13	1.58	2.97	4.86	6.73	1.98	4.05	1.36	3.53	3.93	39.87	1889
1890.....	4.71	6.20	4.37	3.10	6.37	4.92	2.67	4.66	5.13	7.45	2.62	1.74	53.94	1890
1891.....	2.91	4.83	3.71	1.66	2.24	7.13	3.24	1.85	0.93	1.33	5.73	2.92	38.48	1891
1892.....	2.67	2.67	3.38	2.44	7.69	7.89	4.73	2.69	3.20	0.37	2.06	2.74	41.53	1892
1893.....	4.01	6.33	1.89	5.66	6.28	2.51	1.38	1.53	1.85	5.15	2.49	1.50	40.58	1893
1894.....	2.19	3.37	2.36	1.74	4.41	2.23	1.38	0.76	4.25	2.53	2.41	3.15	30.78	1894
1895.....	3.97	0.41	1.98	1.69	1.38	4.20	2.19	2.30	3.92	1.15	4.21	3.51	30.91	1895
1896.....	1.73	2.27	3.67	3.34	3.41	3.98	8.05	1.96	5.16	0.71	1.78	3.04	39.10	1896
1897.....	3.42	2.64	2.81	2.75	4.97	2.98	3.89	3.86	0.29	0.89	5.76	2.50	36.76	1897
1898.....	4.10	2.27	6.44	2.56	4.60	2.70	6.79	5.53	2.15	4.28	4.14	2.29	47.85	1898
1899.....	3.29	1.64	3.95	1.28	4.42	1.95	3.73	0.53	5.56	2.21	1.59	2.78	32.93	1899
1900.....	2.78	2.74	2.25	1.70	2.23	3.71	5.65	5.97	2.19	2.10	4.30	0.99	36.61	1900
1901.....	1.58	1.20	3.09	2.46	4.32	4.82	3.32	3.58	5.64	0.79	1.62	3.47	35.89	1901
1902.....	0.63	0.83	2.99	1.55	2.57	5.55	5.26	1.87	3.49	1.52	2.62	4.07	32.95	1902
1903.....	3.54	3.69	3.29	4.55	1.59	3.69	4.61	6.58	2.07	2.63	2.25	1.95	40.44	1903
1904.....	5.27	3.90	6.22	6.59	4.45	1.67	4.93	2.03	2.27	0.87	0.40	2.68	41.28	1904
1905.....	1.83	1.36	2.61	2.51	5.97	7.50	5.14	4.47	5.10	2.32	2.04	2.08	42.93	1905
1906.....	1.93	1.06	3.57	2.27	2.98	3.81	4.93	7.38	5.16	3.55	2.39	3.79	42.82	1906
1907.....	6.92	1.09	5.80	2.69	3.48	3.81	3.96	2.04	3.13	2.34	1.33	3.41	40.00	1907
1908.....	1.96	3.89	5.02	3.64	4.56	2.17	3.44	3.17	0.73	1.22	1.09	3.05	33.94	1908
1909.....	2.95	5.22	3.02	3.92	4.06	6.44	4.05	5.21	1.73	2.16	2.91	2.55	44.22	1909
1910.....	5.29	4.41	0.54	3.22	4.87	2.57	1.12	0.95	2.59	5.24	2.36	2.29	35.45	1910
1911.....	4.13	2.25	3.26	3.71	2.45	3.78	3.36	5.19	6.53	5.45	2.50	4.54	47.15	1911
1912.....	2.30	1.58	3.77	5.58	5.65	2.21	7.46	7.32	4.41	2.18	1.79	2.35	46.60	1912
1913.....	7.86	2.43	11.84	3.66	3.04	0.97	4.07	4.75	3.70	3.17	3.77	1.92	51.18	1913
26-yr. av...	3.45	2.82	3.74	3.01	4.03	3.86	4.25	3.56	3.35	2.54	2.79	2.68	40.08	

METEOROLOGY—TABLE V
MONTHLY MEAN TEMPERATURE FOR TWENTY-SIX YEARS FOR THE STATE
Temperature in degrees Fahrenheit

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
1888.....	24.3	30.5	34.2	49.2	58.8	70.4	72.1	70.4	60.3	47.9	42.9	33.3	49.5	1888
1889.....	33.3	25.8	40.2	49.9	60.2	66.7	72.5	69.1	62.9	47.9	41.0	43.8	51.1	1889
1890.....	38.8	39.4	34.5	51.3	59.2	73.3	73.0	68.8	62.1	52.7	42.2	31.2	52.2	1890
1891.....	33.0	36.0	35.0	52.0	58.0	71.0	69.0	70.0	67.0	51.0	40.0	39.0	51.8	1891
1892.....	24.0	35.0	35.0	49.0	59.0	73.0	73.0	71.0	64.0	52.0	38.0	29.0	50.2	1892
1893.....	18.0	29.0	38.0	50.2	58.3	70.6	74.5	70.7	65.2	53.7	39.3	32.7	50.0	1893
1894.....	33.7	28.9	45.1	50.6	60.0	71.3	74.3	71.2	67.8	53.9	37.5	33.9	52.4	1894
1895.....	23.4	19.6	35.5	51.7	61.1	72.0	71.6	73.5	69.0	46.9	41.9	33.9	50.0	1895
1896.....	29.4	30.5	32.4	56.9	67.9	69.5	73.2	71.8	62.7	49.0	45.1	32.9	51.8	1896
1897.....	25.5	32.4	41.5	49.3	56.3	68.1	75.5	69.4	66.9	58.1	42.2	32.8	51.5	1897
1898.....	32.4	30.0	45.0	47.2	61.0	71.9	76.0	73.5	67.8	54.1	38.8	28.8	52.2	1898
1899.....	27.8	21.6	36.9	53.3	63.3	71.5	74.1	73.7	64.1	57.4	43.9	30.2	51.5	1899
1900.....	31.1	26.0	32.9	50.1	62.9	69.8	74.1	76.3	69.3	60.5	41.6	31.6	52.2	1900
1901.....	29.2	21.1	39.5	46.7	59.0	70.9	78.1	73.1	64.8	53.8	37.7	27.9	50.2	1901
1902.....	27.3	22.3	41.9	48.2	62.6	66.9	74.0	68.9	63.6	54.6	48.5	29.4	50.7	1902
1903.....	27.1	29.9	46.7	49.9	63.9	64.4	72.9	70.7	65.6	54.0	37.2	23.4	50.5	1903
1904.....	20.7	22.9	39.7	44.4	60.7	68.4	71.4	68.8	65.5	52.2	40.5	28.0	48.6	1904
1905.....	22.7	20.8	42.7	48.5	60.7	69.2	73.0	71.7	65.3	52.6	39.6	32.9	50.0	1905
1906.....	35.7	27.3	31.3	52.1	61.3	69.8	72.1	74.6	68.9	52.7	41.1	32.3	51.6	1906
1907.....	32.2	26.0	45.9	42.5	54.5	65.6	72.6	69.5	65.5	48.8	39.1	33.0	49.6	1907
1908.....	29.1	27.7	43.4	51.0	62.8	69.2	73.9	71.2	68.0	54.1	41.7	33.1	52.1	1908
1909.....	32.2	34.7	37.3	49.1	58.7	70.1	70.7	71.9	63.2	48.8	48.9	25.4	50.9	1909
1910.....	27.6	25.5	48.2	51.5	56.0	65.9	73.8	71.4	66.3	56.7	36.3	25.5	50.4	1910
1911.....	32.8	34.5	37.4	47.7	66.3	70.9	74.0	72.5	67.5	53.3	37.6	36.3	52.6	1911
1912.....	17.9	22.4	32.9	51.9	62.5	66.6	73.4	69.2	67.4	54.8	42.2	33.8	49.6	1912
1913.....	36.0	26.7	40.1	50.0	60.3	69.8	74.5	73.3	64.1	54.1	44.4	34.5	52.3	1913
26-yr. av. ...	28.7	27.9	39.0	49.8	60.6	69.5	73.1	71.4	65.6	52.9	41.1	31.9	51.0	

METEOROLOGY—TABLE VI
MONTHLY RAINFALL FOR TWENTY-SIX YEARS FOR THE STATE
Rainfall—Inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Date
1888.....	3.65	1.74	3.55	1.99	3.77	3.41	4.40	5.16	2.27	3.98	4.25	1.47	39.64	1888
1889.....	3.13	1.35	1.38	1.79	3.71	4.13	4.19	1.50	3.62	1.78	4.02	2.81	33.41	1889
1890.....	4.94	5.25	5.29	3.45	5.52	4.50	1.99	4.66	5.56	4.27	2.53	2.37	50.33	1890
1891.....	2.82	4.91	4.19	2.13	2.20	4.82	3.82	3.07	1.50	1.76	5.00	2.39	38.61	1891
1892.....	2.11	3.03	2.86	3.32	6.32	5.61	3.80	2.99	2.36	0.73	2.32	1.71	37.16	1892
1893.....	2.56	5.13	2.09	6.37	4.97	3.34	2.49	2.17	1.57	4.24	2.09	2.61	39.63	1893
1894.....	2.14	2.79	2.16	2.31	4.00	2.65	1.56	1.67	3.31	2.01	2.17	2.98	29.75	1894
1895.....	4.00	0.69	1.59	2.11	1.80	2.47	2.00	2.96	1.66	1.22	4.11	3.85	28.46	1895
1896.....	1.67	2.21	3.34	2.78	2.67	4.81	8.11	3.38	5.13	1.20	2.63	1.65	39.58	1896
1897.....	1.93	3.64	5.17	3.27	3.93	2.85	4.65	2.72	0.78	0.64	6.62	2.39	38.59	1897
1898.....	5.25	2.32	6.23	2.38	4.10	2.86	3.98	4.50	2.56	3.72	3.17	2.71	43.78	1898
1899.....	3.01	2.11	4.64	1.61	4.32	2.94	4.17	1.82	2.68	2.14	1.72	3.16	34.32	1899
1900.....	2.37	3.46	2.35	1.89	2.40	3.01	4.62	3.68	1.76	1.89	4.15	1.24	32.82	1900
1901.....	1.70	1.24	2.66	3.40	3.96	4.44	2.72	3.33	2.86	0.73	1.53	3.79	32.36	1901
1902.....	1.42	0.88	2.76	2.21	3.09	7.48	4.69	1.67	4.55	2.28	2.60	3.95	37.58	1902
1903.....	2.36	4.95	3.51	4.01	2.82	4.02	3.67	3.20	1.52	2.62	2.10	2.07	36.85	1903
1904.....	3.85	2.69	5.67	3.53	3.79	2.88	4.13	2.74	1.95	1.50	0.37	3.09	36.19	1904
1905.....	1.73	1.58	2.50	3.10	5.63	4.72	3.93	4.46	2.86	3.65	2.63	2.29	39.08	1905
1906.....	1.98	1.16	3.97	1.89	2.17	3.42	5.14	4.77	2.92	3.19	2.59	3.63	36.88	1906
1907.....	6.06	0.85	5.55	2.74	3.47	4.57	5.36	2.48	3.92	2.76	1.93	3.16	42.85	1907
1908.....	1.82	4.10	5.43	3.71	4.72	2.51	4.08	2.59	0.58	1.17	1.06	2.33	34.10	1908
1909.....	3.24	5.39	2.77	4.13	4.72	5.86	3.76	3.56	1.78	2.31	2.52	2.62	42.66	1909
1910.....	4.48	4.05	0.26	3.49	3.80	2.66	3.17	1.58	4.05	4.19	1.89	2.41	36.03	1910
1911.....	3.90	1.95	2.33	4.35	1.69	3.92	2.40	5.39	4.87	4.99	2.91	3.93	42.63	1911
1912.....	2.12	2.08	4.17	4.47	3.12	3.17	5.70	4.08	3.11	2.44	1.10	2.26	37.82	1912
1913.....	7.01	1.94	8.40	3.35	3.53	1.87	5.20	2.52	2.37	3.36	3.52	1.68	44.75	1913
26-yr. av...	3.13	2.75	3.65	3.07	3.70	3.80	3.99	3.18	2.77	2.49	2.75	2.64	37.92	

METEOROLOGY—TABLE VII
MEAN TEMPERATURE AND RAINFALL AT THE STATION AND FOR THE STATE, 1913, AND FOR TWENTY-SIX YEARS
Temperature in degrees Fahrenheit. Rainfall in inches

	January	February	March	April	May	June	July	August	September	October	November	December	Year
Mean temperature at the Station, 1913.....	34.2	25.1	38.5	48.9	58.0	67.4	72.4	71.5	62.5	52.2	42.4	33.7	50.6
Twenty-six years' average temperature at the Station.....	27.6	26.4	37.3	48.1	58.6	67.4	71.4	69.4	64.0	51.2	40.0	30.6	49.3
Mean temperature for the State, 1913.....	36.0	26.7	40.1	50.0	60.3	69.8	74.5	73.3	64.1	54.1	44.4	34.5	52.3
Twenty-six years' average temperature for the State.....	28.7	27.9	39.0	49.8	60.6	69.5	73.1	71.4	65.6	52.9	41.1	31.9	51.0
Rainfall at the Station, 1913.....	7.86	2.43	11.84	3.66	3.04	0.97	4.07	4.75	3.70	3.17	3.77	1.92	51.18
Twenty-six years' average rainfall at the Station.....	3.45	2.82	3.74	3.01	4.03	3.86	4.25	3.56	3.35	2.54	2.79	2.68	40.08
Rainfall for the State, 1913.....	7.01	1.94	8.40	3.35	3.53	1.87	5.20	2.52	2.37	3.36	3.52	1.68	44.75
Twenty-six years' average rainfall for the State.....	3.13	2.75	3.65	3.07	3.70	3.80	3.99	3.18	2.77	2.49	2.75	2.64	37.92

METEOROLOGY—TABLE VIII
SUMMARY BY MONTHS FOR 1913

AT THE STATION	Temperature											Number of days				Precipitation in inches			Prevailing wind
	Mean	Highest	Date	Lowest	Date	Range	Mean daily range	Greatest daily range	Date	Least daily range	Date	Clear	Partly cloudy	Cloudy	Rainfall .01 or more	Monthly rainfall	Average daily rainfall	Monthly snowfall	
January.....	34.2	57	20	4	5	53	18.2	37	8	6	*4	4	3	24	19	7.86	.254	15.25	S. W.
February.....	25.1	62	19	—2	6	64	18.9	32	18	5	28	11	5	12	7	2.43	.087	11.50	S. W.
March.....	38.5	74	14	1	7	73	21.2	35	15	9	2	13	3	15	14	11.84	.382	6.25	S. W.
April.....	48.9	83	25	20	21	63	23.4	40	21	8	28	10	7	13	11	3.66	.122	T	N. W.
May.....	58.0	86	5	25	11	61	25.3	46	15	13	23	18	4	9	8	3.04	.098	.....	N. W.
June.....	67.4	96	30	32	10	64	30.3	41	6	17	8	26	2	2	6	.97	.032	.....	S. W.
July.....	72.4	95	*1	42	11	53	25.8	40	11	15	24	19	11	1	16	4.07	.131	.....	S. W.
August.....	71.5	96	17	45	25	51	27.0	35	*2	14	22	22	8	1	8	4.76	.163	.....	S. W.
September.....	62.5	93	*2	28	23	65	25.4	44	11	9	*18	16	5	9	9	3.70	.123	.....	S. W.
October.....	52.2	81	*6	24	22	57	19.1	39	14	4	28	11	3	17	15	3.17	.102	.50	S. W.
November.....	42.4	73	22	12	12	61	18.1	40	6	5	*26	8	4	18	12	3.77	.126	18.00	S. W.
December.....	33.7	56	2	7	28	49	13.9	27	15	4	24	8	4	19	9	1.92	.062	6.50	S. W.
Sums and averages.....	50.6	96	June *30	—2	Feb. 6	98	22.2	38	May 15	4	Oct. 28	166	59	140	134	51.18	.139	58.00	S. W.
FOR THE STATE																			
January.....	36.0	70	*20	3	9	67	....	42	..	..	..	7	6	18	17	7.01	.230	8.6	S. W.
February.....	26.7	77	21	—15	6	92	....	50	..	..	..	12	6	10	8	1.94	.070	6.9	S. W.
March.....	40.1	80	14	—8	8	88	....	58	..	..	..	11	9	11	13	8.40	.270	5.1	S. W.
April.....	50.0	90	25	18	21	72	....	52	..	..	..	14	6	10	10	3.35	.112	T	N. W.
May.....	60.3	95	4	23	*11	72	....	54	..	..	..	14	8	9	10	3.63	.113	.....	S. W.
June.....	69.8	105	30	29	10	76	....	48	..	..	..	20	7	3	6	1.87	.062	.....	S. W.
July.....	74.5	103	*29	40	11	63	....	44	..	..	..	16	12	3	11	5.20	.168	.....	S. W.
August.....	73.3	102	9	39	25	63	....	48	..	..	..	17	10	4	6	2.52	.061	.....	S. W.
September.....	64.1	102	2	26	23	76	....	50	..	..	..	14	7	9	9	2.37	.079	T	S. W.
October.....	54.1	96	7	18	22	76	....	51	..	..	..	10	7	14	12	3.36	.109	0.3	S. W.
November.....	44.4	78	*7	2	12	76	....	51	..	..	..	10	6	14	11	3.52	.117	10.3	S. W.
December.....	34.5	65	2	—3	28	68	....	38	..	..	..	8	6	17	7	1.68	.055	5.7	S. W.
Sums and averages.....	52.3	105	June 30	—15	Feb. 6	120	....	49	..	..	..	153	91	121	119	44.75	.122	35.4	S. W.

*On other dates also.

METEOROLOGY—TABLE IX
SUMMARY BY YEARS AND GRAND SUMMARY FOR TWENTY-SIX YEARS AT WOOSTER

	1888	1889	1890	1891	1892	1893	1894	1895	1896
AT.....	WOOSTER					EXPERIMENT STATION			
Mean temperature.....	47.4°	48.6°	49.5°	49.7°	48°	48.7°	50.6°	47.8°	49.3°
Highest temperature.....	91.5°	91.5° *1	94.5° Aug. 3	99° Aug. 8	98° July 25	95° *5	98° July 19	98° June 4	93° Aug. 9
Lowest temperature.....	-5° Feb. 9	-5° *2	1° Mar. 2	0° Mar. 1	-20° Jan. 20	-9° Jan. 11	-7° Dec. 28	-6° *8	-6° Feb. 19
Range of temperature.....	96.5°	96.5°	93.5°	99°	118°	104°	105°	104°	99°
Mean daily range of temperature.....	18.7°	18.7°	18.9°	21°	19°	20.2°	22.9°	21.8°	19°
Greatest daily range of temperature.....	42° Apr. 23	42° Apr. 23	41° Jan. 13	42° Sept. 23	46° July 17	45° Aug. 9	45° July 31	55° Oct. 6	43° May 8
Least daily range of temperature.....	2° Jan. 6	2° Jan. 6	4.5° *3	4° Feb. 8	4° *4	3° *6	4° *7	1° Nov. 22	3° *9
Number of clear days.....	125	125	109	133	123	96	127	125	130
Number of partly cloudy days.....	103	103	119	117	132	164	154	117	106
Number of cloudy days.....	137	137	137	115	111	105	84	123	130
Number of days rain fell.....	119	119	149	119	119	129	130	102	134
Total yearly rainfall.....	38.05 inches	39.87 inches	53.94 inches	38.48 inches	41.53 inches	40.58 inches	30.78 inches	30.91 inches	39.10 inches
Greatest monthly rainfall.....	4.95 inches	6.73 in. July	7.45 in. Oct.	7.13 in. June	7.89 in. June	6.33 in. Feb.	4.41 in. May	4.21 in. Nov.	8.05 in. July
Least monthly rainfall.....	1.39 inch	1.36 in. Oct.	1.74 in Dec.	0.93 in. Sept.	0.37 in. Oct.	1.38 in. July	0.76 in. Aug.	0.41 in. Feb.	0.71 in. Oct.
Prevailing direction of wind.....	S.....	S.....	S.....	S.....	S. W.....	S. W.	S. W....	W.....	S. W.....

*1 July 10 and Sept. 1, May 26. *2 Feb. 23 and 24. *3 Jan. 8 and Sept. 10. *4 March 5, Nov. 1, 3 and 25, Dec. 1 and 18. *5 July 7, 25 and Sept. 7. *6 Jan. 24, Feb. 11, and Sept. 21. *7 Dec. 1 and 21. *8 Jan. 12, 13 and Feb. 5. *9 Jan. 10 and March 8.

METEOROLOGY—TABLE IX. Continued
SUMMARY BY YEARS AND GRAND SUMMARY FOR TWENTY-SIX YEARS AT WOOSTER

	1897	1898	1899	1900	1901	1902	1903	1904	1905
AT.....	EXPERIMENT STATION								
Mean temperature	49.4°	50.4°	49.5°	50.7°	48.7°	49.5°	49.1°	47.1°	48.8°
Highest temperature.....	96° *10	96° July 3	95° Aug. 20	95° July 4	95° *12	97° May 4	94° *14	92° July 17	92° July 17
Lowest temperature.....	-18° Jan. 26	-9° Feb. 2	-21° Feb. 10	-10° Feb. 27	-11° Dec. 21	-9° Feb. 5	-9° Feb. 19	-21° Jan. 5	-12° Feb. 14
Range of temperature.....	114°	105°	116°	105°	106°	106°	103°	113°	104°
Mean daily range of temperature.....	21.5°	20.3°	22.9°	20.6°	20.1°	21.3°	21.6°	21.5°	20.8°
Greatest daily range of temperature	49° Oct. 5	50° Nov. 14	52° Oct. 24	43° May 6	43° April 30	45° May 4	48° Nov. 8	48° Dec. 28	42° *16
Least daily range of temperature.....	0° Feb. 6	5° *11	3° Feb. 18	2° Nov. 20	2° April 20	4° *13	3° *15	0° Dec. 25	2° Dec. 18
Number of clear days	124	133	126	149	152	183	148	149	144
Number of partly cloudy days	123	104	114	101	66	49	58	47	44
Number of cloudy days.....	118	128	125	116	147	133	159	170	177
Number of days rain fell	123	134	116	132	142	140	121	136	118
Total yearly rainfall ..	36.76 inches	47.85 inches	32.93 inches	36.61 inches	35.89 inches	32.95 inches	40.44 inches	41.28 inches	42.93 inches
Greatest monthly rainfall.....	5.76 in. Nov.	6.79 in. July	5.56 in. Nov.	5.97 in. Aug.	5.64 in. Nov.	5.55 in. June	6.58 in. Aug.	6.59 in. Apr.	7.50 in. June
Least monthly rainfall.....	0.29 in. Sept.	2.15 in. Sept.	0.53 in. Aug.	0.99 in. Dec.	0.79 in. Oct.	0.63 in. Jan.	1.59 in. May	0.40 in. Nov.	1.36 in. Feb.
Prevailing direction of wind.....	S. W.....	N. W.....	N. S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S.....

*10 July 5 and 6. *11 Jan. 21, March 2 and Dec. 18. *12 July 1, 22 and 28. *13 Jan. 22 and April 28. *14 July 4 and 9. *15 Jan. 4, Nov. 27 and Dec. 6.
 *16 April 9 and May 2.

METEOROLOGY—TABLE IX. Concluded
SUMMARY BY YEARS AND GRAND SUMMARY FOR TWENTY-SIX YEARS AT WOOSTER

	1906	1907	1908	1909	1910	1911	1912	1913	Summary for 26 years
AT.....	EXPERIMENT STATION								
Mean temperature	50.7°	48.4°	51.0°	50.0°	49.2°	50.8°	47.8°	50.6°	49.3°
Highest temperature.....	92° June 9	90° Aug. 12	95° *17	90° Sept. 14	94° *19	101° July 4	93° Sept. 10	96° *20	101° July 4, '11
Lowest temperature.....	-14° Feb. 7	-14° Jan. 20	-3° Feb. 9	-11° Jan. 13	-12° Feb. 19	-11° Jan. 4	-24° Jan. 13	-2° Feb. 6	-24° Jan. 13, '12
Range of temperature.....	106°	104°	98°	101°	106°	112°	117°	98°	125°
Mean daily range of temperature.	20.6°	20.8°	23°	21.4°	23.1°	21.5°	21.4°	22.2°	21°
Greatest daily range of temperature.....	40° April 18	42° Jan. 20	49° Sept. 18	43° *18	51° April 14	45° Mar. 25	43° Feb. 13	46° May 15	55° Oct. 6, '95
Least daily range of temperature.....	2° Jan. 18	4° Aug. 6	5° Dec. 13	3° Dec. 14	3° Nov. 16	4° Mar. 28	6° Jan. 23	4° *21	0° *22
Number of clear days.....	130	109	141	114	127	111	140	166	132
Number of partly cloudy days.....	60	58	78	76	67	83	78	59	91
Number of cloudy days.....	175	198	147	175	171	171	148	140	142
Number of days rain fell.....	142	138	117	144	133	142	124	134	129
Total yearly rainfall.....	42.82 inches	40.00 inches	33.94 inches	44.22 inches	35.45 inches	47.15 inches	46.60 inches	51.18 inches	40.08 inches
Greatest monthly rainfall.....	7.38 in. Aug	6.92 in. Jan.	6.02 in. Mar.	6.44 in. Jan.	5.29 in. Jan.	6.53 in. Sept.	7.46 in. July	11.84 in. Mar.	11.84 in. Mch '13
Least monthly rainfall.....	1.06 in. Feb.	1.09 in. Feb.	0.73 in. Sept.	1.73 in. Sept.	0.54 in. Mar.	2.25 in. Feb.	1.58 in. Feb.	.97 in. June	.29 in. Sept., '97
Prevailing direction of wind.....	S.	N. S. W ...	S. W.	S. W.	S. W.	N. W.	S. W.	S. W.	S. W.

*17 Aug. 3, Sept. 24 and 25.
Dec. 25, 1904.

*18 May 8 and Oct. 9.

*19 July 25 and Aug. 15 and 16.

*20 June 30 and Aug. 17.

*21 Oct. 28 and Dec. 24

*22 Feb. 6, 1897, and

METEOROLOGY—TABLE X
SUMMARY BY YEARS AND GRAND SUMMARY FOR THIRTY-ONE YEARS FOR THE STATE

FOR THE STATE	1883	1884	1885	1886	1887	1888	1889	1890
Mean temperature	49.4°	50.6°	48.0°	49.6°	52.0°	49.5°	51.1°	52.2°
Highest temperature	98° Aug. 22	102° Sept. 28	101° July 21	98.6° July 18	108° July 18	102° Aug. 3	99.5° Aug. 31	103.1° Aug. 3
Lowest temperature	-18° Jan. 22	-34° Jan. 25	-31° Jan. 29	-21.5° Jan. 12	-21° Jan. 7	-15° Jan. 27	-13.5° Feb. 24	-4° Mar. 7
Range of temperature	115.5°	133° *2	132°	120.1°	29°	117°	113°	107.1°
Greatest daily range of temperature	55.2° Mar. 18	50°	58.5° Jan. 30	57° Dec. 11	57° Dec. 11	50°	53° Mar. 30	48.5° Apr. 11
Average number of days rain fell	146	145	148	131	121	125	118	149
Mean yearly rainfall	44.98 inches	36.19 inches	38.06 inches	36.71 inches	33.63 inches	39.64 inches	33.41 inches	50.33 inches
Mean daily rainfall .....	.123 inch	.099 inch	.104 inch	.101 inch	.092 inch	.108 inch	.092 inch	.138 inch
Prevailing direction of wind	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....
	1891	1892	1893	1894	1895	1896	1897	1898
Mean temperature	51.8°	50.2°	50.0°	52.4° *4	50.0°	51.8	51.5°	52.2
Highest temperature	101° Aug. 10	103° July 25	102° June 19	105° *4	106° July 20	103° Apr. 17	113° July 4	105° July 1
Lowest temperature	-5° Mar. 5	-27° Jan. 20	-24° Jan. 11	-27° Dec. 29	-24° Feb. 6	-18° *6	-27° Jan. 26	-20° Feb. 3
Range of temperature	109°	128°	126°	132°	130°	121°	140°	125°
Greatest daily range of temperature	50° *3	51° Sept. 25	54.6°	60° Oct. 19	59° *5	53° Mar. 25	67° *7	.....
Average number of days rain fell	120	121	113	100	89	124	110	121
Mean yearly rainfall	38.61 inches	37.16 inches	39.63 inches	29.75 inches	28.46 inches	39.58 inches	38.59 inches	43.78 inches
Mean daily rainfall .....	.106 inch	.102 inch	.109 inch	.081 inch	.078 inch	.108 inch	.106 inch	.119 inch
Prevailing direction of wind	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....	S. W.....

*1 Sept. 28. *2 Sept. 5 and Dec. 4. *3 April 27 and 30. *4 July 18 and 19. *5 Jan. 15 and March 29. *6 Feb. 20 and 21. *7 Sept. 25 and 26.

METEOROLOGY—TABLE X. Concluded
SUMMARY BY YEARS AND GRAND SUMMARY FOR THIRTY-ONE YEARS FOR THE STATE

FOR THE STATE	1899	1900	1901	1902	1903	1904	1905	1906
Mean temperature	51.5°	52.2°	50.2°	50.7°	50.5°	48.6°	50.0°	51.6
Highest temperature	107° Sept 6	103° *8	109° July 22	100° July 8	104° July 25	99° *10	100° July 10	101° Aug. 21
Lowest temperature	-39° Feb. 10	-20° *9	-20° Feb. 23	-17° Feb. 14	-20° Feb. 19	-30° Jan. 4	-22° Feb. 3	-23° Feb. 6
Range of temperature	144°	123°	129°	117°	124°	129°	120°	124°
Greatest daily range of temperature .....	.....	57° Feb. 9	61° Dec. 14	56° May 4	60° Sept. 25	54° Jan. 5	57° May 24	54° Oct. 13
Average number of days rain fell	107	107	107	114	111	117	118	124
Mean yearly rainfall	34.32 inches	32.82 inches	32.36 inches	37.58 inches	36.85 inches	36.19 inches	39.08 inches	36.88 inches
Mean daily rainfall .....	.094 inch	.090 inch	.089 inch	.103 inch	.101 inch	.099 inch	.107 inch	.101 inch
Prevailing direction of wind	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.
	1907	1908	1909	1910	1911	1912	1913	Summary for 31 years
Mean temperature	49.6°	52.1°	50.9°	50.4°	52.6°	49.6°	52.3°	50.8°
Highest temperature	98° July 22	104° Aug. 3	97° July 30	100° Aug. 17	107° July 4	101° July 15	105° June 30	113° July 4 '97
Lowest temperature	-23° Jan. 6	-22° Feb. 9	-20° Dec. 30	-25° Feb. 19	-19° Jan. 4	-37° Jan. 13	-15° Feb. 6	-39° Feb. 10, '99
Range of temperature	117°	126°	117°	125°	126°	138°	120°	152°
Greatest daily range of temperature	57° Feb. 13	60° Oct. 5	51°	.....	.....	.....	.....	.....
Average number of days rain fell	129	111	124	112	127	112	120	120
Mean yearly rainfall	42.85 inches	34.10 inches	42.65 inches	36.03 inches	42.63 inches	37.82 inches	44.75 inches	37.92 inches
Mean daily rainfall .....	.117 inch	.093 inch	.117 inch	.099 inch	.117 inch	.104 inch	.123 inch	.104 inch
Prevailing direction of wind	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.

*8 July 4, Aug. 6 and 10.

*9 Jan. 20 and Feb. 27.

*10 July 17 and Sept. 29.

METEOROLOGY TABLE XI

MONTHLY MAXIMUM AND MINIMUM TEMPERATURE FOR TWENTY-SIX YEARS AT WOOSTER

DATE	January		February		March		April		May		June		July		August		September		October		November		December	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
1888.....	..	-5	..	-1	..	8	..	19	..	31	..	42	..	43	..	41	..	31	..	27	..	21	..	9
1889.....	54	12	54	-9	71	16	80	21	90	30	87	38	92	49	96	45	92	37	76	23	65	16	65	18
1890.....	66	5	65	14	60	1	74	23	83	30	88	46	94	45	95	40	88	38	81	30	66	24	48	15
1891.....	51	12	60	3	61	0	83	21	82	28	89	44	89	49	99	53	98	42	88	25	71	16	58	16
1892.....	54	-20	54	6	65	10	76	28	86	38	90	56	98	48	92	49	88	36	81	25	67	16	61	-2
1893.....	51	-9	47	-2	75	10	83	24	84	36	92	45	95	47	93	37	95	28	85	24	66	15	62	6
1894.....	56	1	64	-1	75	14	92	24	83	35	93	37	98	41	96	41	93	36	80	28	65	31	57	-7
1895.....	54	-6	60	-6	59	9	80	21	94	27	98	35	92	42	94	42	93	34	73	19	72	18	61	-2
1896.....	53	-2	58	-6	65	4	89	19	86	44	87	39	92	45	93	41	92	34	71	21	69	13	56	1
1897.....	61	-18	54	0	69	11	79	21	78	31	88	37	96	50	92	42	96	28	86	25	65	12	60	2
1898.....	64	-1	64	-9	71	12	77	16	81	32	90	40	96	45	90	46	90	38	86	24	66	13	56	1
1899.....	55	-6	57	-21	67	9	86	21	86	30	92	40	94	45	95	39	94	32	92	22	66	22	63	-2
1900.....	54	-5	65	-10	57	-4	78	20	89	25	90	44	95	44	94	49	89	41	86	30	69	6	55	11
1901.....	53	-4	40	0	69	-1	82	22	82	33	91	38	95	50	94	47	86	34	79	26	67	18	64	-1
1902.....	47	2	59	-9	69	9	83	24	97	29	89	39	93	46	88	40	85	32	77	27	72	24	60	-5
1903.....	60	-8	63	-9	76	21	74	19	89	27	88	41	94	42	92	43	89	32	79	26	71	9	49	-2
1904.....	60	-21	57	-10	74	13	72	12	88	33	88	44	92	46	90	42	89	31	83	19	68	15	63	-1
1905.....	59	-8	43	-12	79	10	77	23	82	31	89	38	92	50	90	46	87	36	80	23	61	16	52	13
1906.....	72	6	65	-14	61	-5	80	21	86	29	92	47	88	46	91	48	90	44	74	22	72	23	58	6
1907.....	67	-14	50	-5	82	12	78	15	81	29	89	40	88	40	90	43	88	34	82	22	55	18	56	9
1908.....	51	4	56	-3	75	21	80	24	89	30	91	36	92	46	95	43	95	28	84	24	68	17	59	7
1909.....	66	-11	60	-2	60	12	81	13	84	31	89	42	89	45	89	41	90	30	81	22	72	21	66	-6
1910.....	45	-1	48	-12	84	18	81	23	82	25	90	35	94	44	94	38	91	34	85	24	66	14	49	0
1911.....	56	-11	62	9	67	4	77	16	92	28	94	46	101	43	97	41	87	37	75	22	65	10	61	7
1912.....	44	-24	55	-16	68	6	78	23	86	36	88	31	90	51	89	41	93	30	82	26	68	18	58	8
1913.....	57	4	62	-2	74	1	83	20	86	25	96	32	95	42	96	45	93	28	81	24	73	12	56	7
Extremes.....	72	-24	65	-21	84	-5	92	12	97	25	98	31	101	40	99	37	98	28	92	19	73	6	66	-11

METEOROLOGY—TABLE XI. Concluded
MONTHLY MAXIMUM AND MINIMUM TEMPERATURE FOR TWENTY-SIX YEARS FOR THE STATE

DATE	January		February		March		April		May		June		July		August		September		October		November		December	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
1888.....	68	-15	68	-10	77	-6	92	19	91	23	102	34	97	42	102	35	92	26	80	22	80	17	62	1
1889.....	61	-8	70	-14	82	10	88	15	96	26	92	38	98	46	100	40	98	28	82	17	77	9	73	10
1890.....	75	1	73	5	69	-4	86	20	92	28	101	39	101	43	103	40	92	33	85	29	76	17	65	3
1891.....	65	3	80	-2	74	-5	95	15	93	25	98	40	95	41	101	39	99	36	93	20	76	0	66	9
1892.....	61	-27	74	-1	80	-6	90	14	99	28	101	47	103	40	99	45	96	34	89	20	76	8	70	-12
1893.....	63	-24	68	-14	87	-8	93	20	94	23	102	40	101	42	101	37	100	24	89	15	76	-2	72	-5
1894.....	66	-16	76	-15	91	3	97	16	98	31	102	29	105	36	104	36	103	27	90	15	79	4	70	-27
1895.....	62	-19	70	-24	86	-7	90	16	102	19	105	29	106	34	103	31	105	25	84	8	85	5	79	-13
1896.....	70	-14	78	-18	73	-7	103	15	99	36	98	33	102	39	102	35	100	25	85	17	79	7	67	-15
1897.....	71	-27	72	-9	82	5	92	11	91	25	102	31	113	44	101	38	105	25	97	20	76	8	71	-7
1898.....	71	-18	72	-20	84	5	87	10	92	29	99	39	105	38	100	40	102	33	96	20	76	2	67	-18
1899.....	66	-15	67	-39	76	0	94	6	96	28	102	36	105	41	104	39	107	26	94	20	79	18	69	-7
1900.....	67	-20	80	-20	70	-9	87	15	97	20	96	38	103	38	103	40	100	33	93	23	80	0	65	-2
1901.....	67	-10	60	-20	84	-8	91	18	90	26	103	30	109	48	101	42	98	29	88	20	79	10	73	-19
1902.....	63	-11	66	-17	82	-4	90	17	98	24	98	33	100	43	97	37	94	24	88	21	87	17	63	-11
1903.....	73	-13	69	-20	85	11	88	10	93	22	95	35	104	42	101	38	98	26	93	15	88	2	57	-11
1904.....	70	-30	75	-18	86	-1	81	7	95	27	98	37	99	41	97	38	99	23	92	15	75	0	69	-16
1905.....	65	-17	54	-22	85	-5	89	12	93	26	99	34	100	44	96	41	95	30	89	20	71	10	58	2
1906.....	79	-14	72	-23	74	-12	91	18	94	24	100	34	98	43	101	43	98	36	91	18	82	14	68	-15
1907.....	75	-23	66	-19	96	-2	86	10	89	24	96	36	98	37	96	40	93	29	88	19	71	11	69	2
1908.....	59	-8	66	-22	85	12	91	16	96	25	100	33	102	42	104	37	100	24	90	15	77	5	68	-2
1909.....	74	-17	70	-17	70	6	90	13	91	24	96	36	97	40	96	35	95	25	86	16	80	15	75	-20
1910.....	62	-24	68	-25	90	12	88	19	88	21	97	33	98	43	100	36	93	34	94	18	78	11	63	-10
1911.....	68	-19	76	-2	81	1	86	8	101	25	101	40	107	41	104	34	97	33	88	20	79	8	79	-3
1912.....	57	-37	68	-25	80	-3	89	15	91	31	93	28	101	42	95	40	99	29	93	23	82	8	74	-5
1913.....	70	3	77	-15	80	-8	90	18	95	23	105	29	103	40	102	39	102	26	96	18	78	2	65	-3
Extremes.....	79	-37	80	-39	96	-12	103	6	102	19	105	28	113	34	104	31	107	23	97	8	88	-2	79	-27

TABLE XII: MONTHLY RAINFALL AT DISTRICT TEST-FARMS

Rainfall—inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Strongsville														
1897	.91	1.62	3.29	3.88	5.99	1.88	5.56	3.25	1.13	.87	7.02	1.92	37.32	1897
1898	5.47	3.75	4.82	2.37	3.43	5.60	4.25	5.69	2.72	5.59	3.25	7.39	54.33	1898
1899	4.35	2.32	5.25	3.11	5.58	2.10	5.75	.61	3.14	2.86	1.55	6.36	42.98	1899
1900	3.22	5.53	3.01	2.22	1.85	1.36	4.73	2.49	3.56	2.22	4.91	1.94	37.04	1900
1901	2.73	2.20	4.35	4.76	5.14	3.32	3.15	7.46	5.51	.47	2.51	5.34	48.94	1901
1902	1.17	1.40	2.64	2.91	4.29	9.34	7.39	4.62	5.58	2.73	2.35	3.34	47.66	1902
1903	2.37	2.97	3.18	6.68	1.45	3.78	6.49	8.72	1.88	3.09	2.70	2.62	45.93	1903
1904	6.51	3.59	4.68	3.47	6.07	1.45	5.80	3.48	2.73	1.20	2.50	3.87	43.35	1904
1905	2.48	2.73	3.24	3.97	4.38	2.18	5.04	4.11	3.50	2.95	2.92	1.66	39.16	1905
1906	2.03	2.06	....	1.93	1.01	4.67	2.72	4.30	6.70	...	4.77	5.12	...	1906
1907	5.21	1.20	....	....	....	....	....	....	....	....	....	....	....	1907
1908	....	....	....	....	2.82	2.78	3.70	3.10	1.00	1.60	1.08	1.90	....	1908
1909	2.48	2.56	....	3.49	4.13	3.20	4.40	3.60	2.71	2.60	2.80	1.30	....	1909
1910	4.80	2.21	1.10	....	3.05	2.50	1.00	1.37	4.85	3.90	3.98	2.99	....	1910
1911	....	1.16	1.85	3.03	1.95	1.80	.80	3.28	5.33	3.85	....	1.51	....	1911
1912	1.38	1.49	2.91	5.12	3.62	1.80	6.88	4.74	4.34	2.40	.20	1.89	36.77	1912
1913	4.50	1.45	9.30	2.08	2.15	1.30	2.60	1.70	3.30	3.59	2.61	1.13	35.71	1913
Av.....	3.31	2.39	3.82	3.50	3.56	3.07	4.39	3.90	3.62	2.66	2.88	3.14	42.65	

TABLE XII: MONTHLY RAINFALL AT DISTRICT TEST-FARMS—Continued

Rainfall—inches

Date	January	February	March	April	May	June	July	August	September	October	November	December	Year	Date
Germantown														
1905	.....	1.07	6.93	3.45	7.70	3.00	3.80	7.90	3.56	4.10	2.24	2.28	.....	1905
1906	2.92	1.32	6.25	1.88	1.34	2.88	6.24	7.46	2.30	1.65	3.80	4.32	42.79	1906
1907	7.22	6.33	4.24	2.26	3.20	3.65	4.10	1.93	5.64	2.92	3.25	3.22	43.96	1907
1908	2.11	7.67	2.07	4.53	4.47	1.42	3.86	1.36	.35	.27	1.70	1.31	31.95	1908
1909	3.41	4.25	3.00	5.58	6.98	5.93	4.50	3.34	.89	3.13	1.95	4.00	49.45	1909
1910	3.00	1.46	6.01	1.87	5.08	1.58	3.95	1.11	3.96	7.60	.96	2.85	36.41	1910
1911	5.00	1.68	4.29	6.01	1.36	2.67	1.78	4.56	5.16	4.48	3.06	3.81	42.35	1911
1912	3.23	7.32	5.25	6.51	3.49	2.24	3.78	9.05	2.50	2.79	.72	3.30	43.58	1912
1913	8.40	2.05	5.25	2.62	2.40	2.40	3.49	2.23	2.33	2.56	4.80	.88	44.33	1913
Av....	4.41	3.10	4.28	4.15	4.03	2.86	3.91	4.33	2.97	3.28	2.50	2.89	41.85	
Carpenter														
1903	..	5.07	3.75	5.69	5.07	4.23	1.02	1.02	2.60	2.73	3.28	.....	1903	
1904	3.74	2.89	3.03	2.69	3.16	3.79	2.71	2.08	1.10	.18	3.40	33.84	1904	
1905	1.02	1.35	2.70	7.02	5.11	3.77	4.11	1.02	5.20	2.45	3.51	41.33	1905	
1906	3.53	1.85	1.43	1.40	6.39	1.40	2.92	3.24	2.58	3.50	3.50	35.61	1906	
1907	8.94	2.28	3.57	3.47	4.49	4.84	4.10	2.94	2.38	2.14	1.72	47.00	1907	
1908	1.37	4.31	5.15	4.36	2.92	3.74	3.50	.48	.85	1.37	2.13	37.98	1908	
1909	3.05	5.72	4.10	4.29	7.63	4.18	2.18	.86	2.12	.90	2.05	39.85	1909	
1910	6.40	4.70	3.23	2.91	2.35	3.40	1.74	.99	1.68	1.42	2.80	31.52	1910	
1911	5.56	3.08	3.90	2.06	6.14	1.19	4.69	5.18	3.68	2.20	4.01	43.95	1911	
1912	1.48	2.44	4.04	2.90	2.92	5.46	2.56	2.51	1.80	.38	2.09	31.97	1912	
1913	6.78	1.98	2.74	4.23	2.29	2.64	2.38	2.07	2.89	2.34	2.36	34.41	1913	
Av....	4.19	3.06	3.72	3.42	3.73	4.41	3.51	2.90	2.04	2.44	1.78	2.80	37.78	